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ABSTRACT

Designed to assess the validity of the determinations among applications for Social Security disability benefits, a comprehensive evaluation of each applicant was made including medical, psychological, social, and vocational data on each subject and his family. A followup study was conducted for 705 applicants from Ohio two to six years after the initial application was made for disability benefits. Results of the followup showed that 66.7 percent were receiving retirement benefits, 11.1 percent were substantially gainfully employed, and 53 percent had personal incomes of less than $150 per month. The agency participation and applicant characteristics (health status, economic and employment status, family situation, and general activities and situation) are fully described. (RD)

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PATTERNS OF ADJUSTMENT TO DISABILITY

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FORWARD

When we began our research in the Natural History of Disability with support from the Social and Rehabilitation Services Administration a logical starting point was to organize a follow-up study of 705 applicants for benefits under the Social Security disability insurance program. These applicants received comprehensive evaluations in an earlier study which was conducted in 1962 through 1965. Dr. Ludwig has ably supervised the follow-up study assisted by Dr. Geoffrey Gibson of the University of Chicago and by Dr. John Collette of the University of North Dakota who were Graduate Research Assistants in the Division of Disability Research. Dr. Ludwig prepared this report which embodies the findings of the follow-up and very useful information based upon a longitudinal analysis of these findings and data collected in the earlier study. The facts and insight represented in this report should be of great interest to those engaged in the theoretical, methodological, and operational aspects of disability.

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Saad Z. Nagi, Ph.D., Director
Division of Disability Research

January, 1970

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CHAPTER I

BACKGROUND OF THE STUDY

The Initial Study

As of March, 1968, 1.2 million disabled workers were receiving monthly benefits under the social security disability insurance program.[1] This compares to 1.1 million in March of 1967 and 1.0 million in 1966.[2] Each year, varying with modifications in the law, roughly two hundred thousand workers qualify for benefits and are added to the beneficiary roles while a somewhat smaller number are removed due to death, legal retirement age, or employment. Validity and equity in the determination of disability are important considerations in the operation of a public program of this magnitude. The complex problems of criteria, evaluation, and decision making involved in such determinations constituted the major concern in an initial study, the results of which are reported elsewhere.[3] A few aspects of the earlier study will be reported here in order to place this follow-up study in perspective.

The major thrust of the initial study concerned the assessment of methods of evaluating applicants and the identification of influences upon the process of making decisions regarding disability benefits and rehabilitation services. This was accomplished through a comprehensive evaluation of disability and rehabilitation potential by a study team of clinicians of a sample of disability applicants. A wealth of information and test data were collected on each applicant by the study team which included physicians of several of the specialties, a psychologist, social worker, vocational counselor, and occupational therapist. The information accumulated on each applicant falls into the five areas represented by the members of the study team: 1) medical aspects of the disability including medical histories, physical examinations, laboratory and radiological findings, and reports of consultations, 2) psychological evaluations based upon clinical interviews and psychometric testing, 3) social history of the applicant and his family, 4) a complete work history, and 5) occupational and vocational assessments based upon testing and observations in actual task performance situations.

The heart of the analysis consisted in comparing the disability determinations made under routine procedures with those made possible by comprehensive evaluation of the study team. Actually three major judgments concerning each applicant were made and compared for the purpose of identifying and studying incongruencies in the assessment of disability. The first judgment was the disability determination made by the state before the applicant was chosen for study. The second was a determination also made by the state but after it was furnished evidence accumulated by the study team and independent of any judgment made by the study team. A third judgment was made by the study team independent of the state decisions.

The study was carried out at three centers drawing on populations from three different regions of the country: the two standard metropolitan areas of New Orleans and Minneapolis-St. Paul, and the twenty county area of Ohio comprising Columbus and the surrounding area. The total sample population was 1,843 consisting of 563 applicants from Louisiana, 575 from Minnesota, and 705 from Ohio. Applicants chosen for study were limited to those 1) under 64 years of age, 2) who met the qualifications for social security coverage, 3) whose impairment was not a communicable disease, a mental illness, or terminal illness.

Purpose and Scope of the Follow-up

Certain aspects of the initial study and of the particular population under investigation made a follow-up study highly desirable. To begin with, the initial study included an agency action involving each applicant which was to have a profound effect upon their ultimate adjustment to physical impairment. Approximately 60 percent were allowed benefits and began receiving a monthly income by virtue of their disability. The remaining 40 percent were denied benefits and were required to turn elsewhere in coping with their perceived disability. Little is presently known regarding the impacts of agency decisions of this type. Only one fairly comprehensive study exists regarding disabled workers who were granted benefits,[4] and only one study of limited scope has been made of those who fail to receive benefits.[5] This was the most compelling reason for entering into the follow-up study. A myriad of pressing questions can be raised regarding unsuccessful applicants. What in general happens to applicants who perceive themselves to be disabled, who are not and have not been employed over a period of at least six months (the waiting period before benefit entitlement) but who are not found to meet the legal criteria and are denied benefits? Do they return to work? Do they fall upon the responsibility of other social agencies? What alternative coping mechanisms are available and utilized by these families?

Moreover, with respect to those allowed benefits, little is known about the impacts of being a long-term beneficiary of disability benefits. Are they better or worse off than their counterparts who have been denied benefits, and in what respects? In sum and more generally, what long-range adjustments to disability have been made by the disabled worker and those affected by his disability and what part does the granting or withholding of disability benefits play in that adjustment? These questions are best answered through the study of former applicants about whom a great deal is already known such as the population of this follow-up study.

Another justification for the follow-up stems from the nature of information accumulated in the initial study. The follow-up study permits to a limited extent a testing of some of the predictions and prognostications made at the time of the disability determination by both the clinical team and the state examiners, particularly with respect to rehabilitation potential.

The 705 applicants from Ohio were admitted on an in-patient basis to Ohio State University Hospital, Department of Physical Medicine and Rehabilitation, formerly the Ohio Rehabilitation Center, for the battery of tests utilized by the study team clinicians. The follow-up was carried out by the Division of Disability Research of the Department of Physical Medicine and Rehabilitation, and subjects were recontacted as former patients of the hospital, not as disability applicants. This gave the study an air of independence and removed the possible threat that subjects might feel if approached because of their connection with the disability program.

Efforts were made to contact and conduct a two-hour structured home interview with each of the 705 applicants. In order to obtain more detailed family information, spouses of male applicants were also interviewed. At the time applicants were interviewed, arrangements were made to interview female spouses within a week or ten days by another interviewer.

Applicants in the original study were selected and evaluated during the period between July 1, 1961 to July 1, 1964. The interviewing for the follow-up study began in February of 1967 and was completed in February of 1968. The minimum interval, then, between observations of subjects is approximately two and one-half years, and the maximum is approximately five and one-half. Table 1 indicates the actual time elapsed at time of follow-up since the original evaluation of all 705 cases.

The Actual Follow-up Population

A total of 486 of the 705 cases were actually contacted and interviewed (68.9 percent). Death accounted for the loss of 106 cases or 15.1 percent. Twenty-seven or 3.8 percent refused to be interviewed and the remaining 86 or 12.2 percent could not be located or interviewed for other reasons. Successful contact was related to the interval since the original evaluation (Table 2). Where the last contact with applicants was over four and one-half years, only 59.6 percent were recontacted for interview compared to 74.1 percent of those where the initial contact was less than three and one-half years. This increasing rate of attrition over time is due almost solely to the high proportion of deaths in this disabled population.

Table 1

Status of Case and Time Lapse Since Initial Study

Status of Case	Interval Between Contact							
	2½-3½ years		3½-4½ years		4½-5½ years		Total years	
	f	%	f	%	f	%	f	%
Interviewed	289	74.2	116	64.7	81	59.6	486	68.9
Dead	43	11.0	30	16.8	33	24.3	106	15.1
Refused	15	3.8	8	4.5	4	2.9	27	3.8
Not interviewed--other	43	11.0	25	14.0	18	13.2	86	12.2
Total	390	100.0	179	100.0	136	100.0	705	100.0

Table 2

Proportion of Applicants Deceased, by Length of Time Since Initial Contact and Age

Time Since Initial Contact	Proportion Deceased at Age Levels			
	Less than 50	50-59	60-69	Total
	%	%	%	%
2½ - 3½ years	6.3	8.8	17.9	11.0
3½ - 4½ years	11.1	18.2	19.1	16.8
4½ - 5½ years	25.9	20.3	28.0	24.3

Eleven percent of the group seen within three and one-half years had died compared to 24.3 percent of those who had not been seen in over four and one-half years (Table 1). Since death is strongly age-related, comparisons of losses by death over time have been made at age levels (Table 2). In general, the relations between time interval and deaths remain apparent, but the effect of age is also in evidence.

Attrition through death introduces an unavoidable systematic bias. This is particularly true in studying a sick or disabled population. Studies of the living are by definition limited to those who survive and, by a process of selection, to the relatively more healthy. Moreover, the fact that death is age related suggests the likelihood of other biases resulting whereby the follow-up population is not representative of the original study population. The extent of such bias introduced by death is examined in Table 3. It will be noted that while there is a disproportionate number of deaths among the older age category, the more severely limited, those receiving benefits, and among males, it is not sufficiently great to change the makeup of the follow-up population actually interviewed from that of the initial study population. For example, while 83.9 percent of the deceased were applicants who had received benefits, the interviewed population is still composed of 58.1 percent on benefits compared to 60.2 percent in the total initial study population.

A total of 290 of the male applicants interviewed were living with their spouses, and the spouses of 235 of them were actually interviewed. Of the remaining 55, 25 refused to be interviewed and 30 had not been interviewed at the time it was decided to concentrate remaining resources on attempting to contact what applicants had not yet been located.

Table 3

Comparison of Characteristics of the Deceased with those Interviewed

Selected Characteristics	Proportion with characteristics among the: Deceased %	Interviewed %	Initial Study Population %
Granted benefits at time of initial study	83.9	58.1	60.2
Possessed near total physical limitation	33.0	12.0	14.8
Long term disorder	50.0	39.1	37.6
Acute incident	4.7	8.4	7.5
60 years or older	47.2	32.9	35.2
Grade school or less education	62.3	60.3	61.0
Males	84.0	75.1	77.0
Pre-disability personal income, less than $300	39.6	40.3	41.3
Non-white	19.8	12.3	13.3
Total Sample	(106)	(486)	(705)

The 235 cases with spouse interviews are clearly representative of the married male segment of the study population as evidenced by Table 4. For example, among the interviewed cases there are the same proportion of those granted benefits, those fifty years of age or older, and those with only grade school education, as in the total sample of married male cases.

Characteristics of the Follow-up Population

The most important characteristics of the study population stem from the original focus of the study: applicants for social security disability benefits. Disability applicants are on the average older than the general labor force population, are less educated, and are found in the lower levels of employment with modest incomes. In general, they represent those members of the labor force most vulnerable to unemployment by virtue of a physical impairment. A more detailed description is contained in Table 5. It should be noted that these are the characteristics of the follow-up population, roughly three years after the original study, whose numbers have been decimated over time by death (15.0%) and loss of contact (12.2%).

The vast majority are married (70.6%), live in nuclear families (63.8%), are male (75.1%), white (87.7%), and older (63.9% over 50). The majority of the former disability applicants have little personal income (53.4% less than $150 per month), and overall household income is also scant (56.0% less than $300 per month). The major source of income for the applicants is social security: 66.7 percent on disability benefits and 6.8 percent on retirement benefits. Only 11.1 percent are substantially gainfully employed.

Table 4

Comparison of Interviewed and Non-interviewed Spouses of Male Subjects by Selected Characteristics

Selected Characteristics	Proportion with Characteristic Among: Interviewed %	Not Contacted %	Refused %	Total %
Husband granted benefits at initial study	58.3	63.3	48.0	57.9
Husband with near total physical limitation	51.5	56.7	44.0	51.4
Husband 50 years or older	74.0	66.7	84.0	74.1
Husband with grade school or less	60.3	70.0	76.0	62.4
Husband's pre-disability personal income less than $300 per month	22.9	33.3	28.0	24.5
Non-white	12.3	6.7	4.0	11.0

Table 5

Selected Characteristics of the Follow-up Population

Selected Characteristics	Frequency and Percent of Total Population (N=486) f	%
Sex		
Male	365	75.1
Female	121	24.9
Race		
White	426	87.7
Non-white	60	12.3
Age (1967 ages)		
Less than 35	8	1.6
35-39	20	4.2
40-44	37	7.6
45-49	62	12.7
50-54	81	16.7
55-59	118	24.2
60-64	125	25.8
65-69	35	7.2
Marital Status		
Married	343	70.6
Single	28	5.8
Divorced or separated	70	14.3
Widowed	45	9.2
Family Status		
Number of nuclear families	310	63.8
Number of extended families	42	8.6
Number of families with dependent children	146	30.0
Applicant Income (all sources)		
None	28	5.8
Less than $50 per month	9	1.8
$50-$99 per month	106	21.8
$100-$149 per month	119	24.5
$150-$199 per month	60	12.3
$200-$299 per month	91	18.7
$300-$399 per month	32	6.6
$400-$499 per month	10	2.1
$500 or more	13	2.6
No data	18	3.7

Table 5--Continued

Selected Characteristics	Frequency and Percent of Total Population (N=486) f	%
Household Income (all sources)		
None	10	2.1
Less than $50 per month	2	0.4
$50-$99	46	9.4
$100-$149	63	12.9
$150-$199	50	10.2
$200-$299	101	20.8
$300-$399	68	14.0
$400-$499	32	6.6
$500 or more	58	11.9
No data	56	11.5
Major Source of Applicant Income*		
Social Security disability benefits	324	66.7
Social Security retirement benefits	33	6.8
Employment	54	11.1
None	28	5.8
Other**	47	9.7

*Mutually exclusive categories.

**Veterans' benefits, welfare, private pensions and insurance, property rental, personal business, each with a distribution of ten or less.

Summary

The major concern of the initial study was to assess the validity of the determinations among applicants for social security disability benefits. This entailed a comprehensive evaluation of each applicant and the accumulation of a wealth of medical, psychological, social, and vocational data concerning each subject and his family. Re-evaluation and determinations were made on the basis of different levels of information concerning the applicants and analyses were made of the incongruencies in determination. The nature of the initial study made a follow-up study highly desirable.

The follow-up study was limited to the 705 applicants from Ohio. A total of 486 were actually interviewed in addition to 235 wives of male applicants. Death accounted for the loss of 15 percent of the cases and 16 percent could not be located or refused to be interviewed. Despite the biases introduced by attrition, the interviewed cases remain fairly representative of the initial study population.

The follow-up study population consists of a group of disability applicants, 2½ to 5½ years after initial application for disability benefits. They are on the average older than the general labor force population. At the time of follow-up, 66.7 percent were found to be receiving disability benefits, 6.8 percent were receiving retirement benefits, and 11.1 percent were substantially gainfully employed. Fifty-three percent had personal incomes of less than $150 per month. A more detailed description of the population and differences within it follow.

CHAPTER II

AGENCY INTERVENTION

The Disability Determination

At the time of the initial study, an agency determination was made and placed in effect. Applicants were either granted benefits and began receiving monthly checks, or they were denied and informed that their physical condition was not severe enough to afford them disability benefits. Such action, however, is not final. On the one hand, disability beneficiaries sometimes do return to work and forfeit their benefits, or they reach retirement age and are transferred to the roles of retirement beneficiaries. Death also reduces their numbers. On the other hand, those who are denied benefits may appeal their case or reapply if their condition grows worse. Table 6 provides an accounting of the 486 original applicants who are in the follow-up. It will be noted that while 63.5 percent were granted disability benefits initially, by the time of the follow-up study 74.7 percent had been granted disability benefits at one time or another. However, the ranks of those receiving benefits were reduced 5.5 percent by those reaching retirement age and 1.2 percent by those returning to gainful employment. By the time of follow-up, 67.9 percent of the study population were receiving disability benefits.

The greatest reduction of disability beneficiaries stems from those not represented in the follow-up study--the deceased.

Table 6

Disability Status of Applicants

Applicant Status	Distribution of Follow-up Cases (N=486) f	%
Granted benefits initially	309	63.5
Granted benefits after hearing	8	1.7
Granted benefits after reapplication	46	9.4
Proportion on benefits at one time or another	363	74.7
Benefits discontinued because of retirement eligibility	27	5.5
Benefits discontinued because of gainful employment	6	1.2
Proportion on benefits at time of follow-up	330	67.9

Of the original 705 applicants whom we attempted to follow up, 89 or 21.0 percent of the 424 granted benefits had died in the interim.

Of those denied originally and later allowed benefits (45 applicants) 19 (42.2%) were clinically assessed to be fit for work initially and evidently became worse while 19 (42.2%) were clinically assessed to be unfit by the study team at the time of the initial study but were denied benefits by the state agency. These cases were either erroneously assessed by the state agency originally and the study assessment was correct or they grew worse thereafter. The remaining 7 cases were borderline cases on the basis of clinical judgment initially and were denied by the state.

Of those 45 allowed benefits after the original denial, 39 or 86.7 percent were suffering from a "long term dysfunction" rather than an acute incident, suggesting their disability stemmed from a worsening or more serious assessment of the original disorder which brought about their initial application.

Older applicants were more likely to eventually be granted benefits upon reapplication. Fifty percent of those over 60 who were denied finally were granted benefits compared to only 11.0 percent of those under 45 and only 25.0 percent of those between 45 and 59. Sex also appeared to be a factor. Thirty-one percent of the males who were denied benefits were granted benefits upon reapplication, compared to only 16.7 percent of the females. This appears to be due both to the fact that fewer females reapplied for benefits and the fact that among those who did reapply, relatively fewer were granted benefits. Half of the females who reapplied were granted benefits compared to 78 percent of the male reapplicants.

Services of the Bureau of Vocational Rehabilitation

Part of the normal procedure in processing disability applicants is an evaluation of rehabilitation potential and referral to the Bureau of Vocational Rehabilitation. In the initial study, in addition to the regular referral evaluations, the study team also made rehabilitation assessments as well as recommendations regarding specific rehabilitation services needed. The follow-up study makes it possible to ascertain the extent of such services received by the disability applicants.

Of the 486 follow-up cases, 82 were referred to the Bureau by both the state agency and the study team, 71 were referred by the disability determination agency only, and 64 by the study team only for a total of 217 referrals or 44.6 percent of the applicants. However, only 143 or 29.9 percent had made any contact with the Bureau and only 72 or 14.8 percent had contact as a result of referral by the disability determination unit (see Table 7). The remaining 14.6 percent had contact with the BVR offices as the result of some other later referral such as a personal physician or the Bureau of Workmen's Compensation.

However, BVR contacts for disability applicants often are limited to a single office call. Only 58 percent of those who had contact with BVR report receiving any services. While 44.6 percent of all disability applicants were referred to the BVR, only 29.9 percent had any contact with BVR, and only 17.1 percent reported receiving any services. Moreover, 7.4 percent of disability applicants who constitute 25.1 percent of those with actual contact with BVR reported that the Bureau's services were of help to them (Table 7).

Table 7

BVR Experience of Disability Applicants

Case Status	Distribution Proportion of all cases (N=486) f	%	Proportion of cases with BVR contact (N=143) %
Referred by state agency	71	14.6	
Referred by study team	64	13.2	
Referred by state and study team	82	16.9	
Total cases referred	217	44.6	
Actual contact with BVR	143	29.9	
Contact as a result of state or study referral	72	14.8	50.4
Contact as a result of some other referral	71	14.6	49.6
Referrals reporting medical care received including physical therapy	29	6.0	20.2
Referrals reporting training received	46	9.5	32.2
Referrals reporting help in job placement	10	2.1	7.0
Referrals reporting BVR services improved health	25	5.2	17.5
Referrals reporting BVR lessened physical limitation	21	4.3	14.7
Referrals reporting BVR services made it possible to actually find work	6	1.2	4.2
Referrals who received at least one service from BVR (medical help, training, counseling)	83	17.1	58.0
Number of referrals who felt BVR was of some help to them in one way or another	36	7.4	25.1

Help of Other Agencies

Information was also collected to determine the extent of help received by the applicants and their families from other agencies.

There were 192 applicants or 39.5% who applied for welfare assistance at some time in their adult life; 155 or 32.3% had applied for welfare since the onset of their disability. Length of welfare assistance ranged from less than three months (16.3%) to three years or more (15.0%). At the time of follow-up, 22 or 4.5 percent of applicants were receiving welfare and an additional 10 applicants indicated welfare was being received through some other member in their household. In other words, the households of 32 applicants (6.7%) were receiving welfare income as part of their long term adjustment.

Another major source of agency help comes from the Bureau of Workmen's Compensation. In all, a total of 186 applicants (39.3%) received benefits from BWC in connection with their disability. Lump sum settlements averaging about $2,300 and ranging from less than $400 (7%) to over $5,000 (7%) were received by 97 applicants (20%). Weekly benefits were received by 130 applicants (26.7%) averaging about $36 per week and ranging from less than $10 per week (2%) to over $50 per week (4%). Weekly benefits ranged from less than 10 weeks (17%) to forty or more weeks (66%). However, by the time of the follow-up, only 51 or 10.5 percent were still receiving some support from the Workmen's Compensation Bureau.

The Veteran's Administration had been contacted by 20 percent of the applicants regarding their disability, and at the time of follow-up 13.4 percent were receiving income in the form of veterans' benefits. The amount of such income was not ascertained.

In the interview of applicants, efforts were made to gather information regarding help received from other agencies, such as voluntary associations and churches. Only 17 applicants reported receiving help of this kind. Perhaps such help was uncommon or applicants failed to recognize it or to remember it.

Assistance with medical expenses was another source of agency assistance. Eighty-six or 20.0 percent of the 431 applicants with doctor bills during the previous year had them paid by some public agency, while the expenses of 26 percent of those hospitalized were met by public agencies. It is suspected that a good deal more expenses were covered by public agencies but that applicants were not totally aware of it since an additional 20 percent did not know how their doctor bills were paid and 16 percent did not know who paid their hospital bills. In these cases, it is likely that the patient was never billed directly.

Negative feelings were often expressed regarding the lack of help from public agencies. Respondents were asked if there had been some person or thing that could have been of assistance with respect to their disability but was not. On the basis of free response and not forced choices, 11 per cent mentioned public agencies such as the social security administration, the Bureau of Workmen's Compensation, and public welfare. In contrast employers were singled out by about 2 percent and doctors by another 2 per cent.

From the data, it would appear that public agencies play a major role in the adjustment of disability applicants but more in the form of income maintenance than in rehabilitation. Social security disability benefits provided the major source of income for most applicants, 66.7 percent, while social security retirement benefits provided the major source of income for 6.8 percent. Employment was the major income of 11.1 percent. There were 9.6 percent who relied primarily on some other source, such as workmen's compensation, veterans benefits, private pensions and the like, while 5.8 percent reported no income whatsoever. Each of these major sources were supplemented for many by some other source (Table 8). For example, 168 applicants (51.8%) whose major source of income was disability benefits had an additional source of income, primarily as veterans benefits (15.7%), workmen's compensation (12.7%), or private pensions and insurance (13.6%). A few (20 or 6.2%) had a third source of income. Of the 33 applicants whose major income was social security retirement benefits, one-third reported at least one other source of income most of which was other pensions and insurance (15.2%) and workmen's compensation (9.1%). Two applicants had a third source. Among those whose major source of income was work, fifteen or 27.8 percent had an additional source, such as veterans' benefits (11.1%), private pensions and insurance (9.1%) and other income (9.3%). For those whose major source of income was not social security benefits or work, the major source corresponds to the supplemental source. Most of these applicants received their major and only income from public assistance (23.4%), private pensions and insurance (21.3%), veterans' benefits (12.8%), workmen's compensation (12.8%), and other sources (31.9%). Three applicants or 6.4 percent had one additional source of income.

This chapter was devoted to sources of help. Chapter IV details the amounts of income of applicants.

Table 8

Major and Supplemental Sources of Income

Supplemental Sources	Major Sources									
	S.S. Disability Benefits		S.S. Retirement Benefits		Work		Other		Total	
	f	%	f	%	f	%	f	%	f	%
Personal work or business	16	(5.0)	2	(6.1)						
Veterans benefits	51	(15.7)	2	(6.1)	6	(11.1)	6	(12.8)	65	
Private pensions and insurance	44	(13.6)	5	(15.2)	3	(5.6)	10	(21.3)	62	
Public assistance	10	(3.1)	1	(3.0)	--	(0.0)	11	(23.4)	22	
Workmen's Compensation	41	(12.7)	3	(9.1)	1	(1.9)	6	(12.8)	51	
Other (rental, dividends, interests, gifts)	26	(8.0)	--	(0.0)	5	(9.3)	15	(31.9)	46	
Total of all sources	188		13		15		50		266	
Total cases with supplemental sources	168	(51.8)	11	(33.3)	15	(27.8)	3	(6.4)	197	(43.0)
Total cases	324	(100.0)	33	(100.0)	54	(100.0)	47	(100.0)	458*	(100.0)

*28 applicants reported no income whatsoever.

CHAPTER III

HEALTH STATUS OF FORMER DISABILITY APPLICANTS

All of the applicants at the time of initial study had presented themselves as disabled due to a health condition and were unemployed as a result of it. One purpose of the follow-up was to determine the health condition of applicants a considerable length of time after the initial onset ($2\frac{1}{2}$-5 years) so that some indication of their long term adjustment could be obtained. Following is a report of these findings.

Mortality

As reported in Chapter I, 106 or 15.0 percent of the 705 applicants were found to be deceased by the time of follow-up. The greatest proportion of deaths were found among those over sixty who had not been contacted in over four and one-half years (28.0 percent). Table 9 compares the death rates within specific age groups of the disabled population with the general population. It will be noted that the death rates in the disabled population are significantly higher than in the general population, but that in the older age categories the death rate in the general population begins to approach that of the disabled population. In other words, the death rate is four times greater in the disabled population at ages 50-54 but only 2.5 times greater at ages 65-69. Death rates are not shown for those in the study population under age 50 because of the small number of cases upon which to base rates.

Table 9

Deaths per 1,000 Population of the Study Population and the General Population by Specific Age Categories

Age Categories	Death rate in study population per year	Death rate in general population per year--1965	Ratio of study over general rate
Age 50-54	36.4	9.1	4.0
Age 55-59	43.2	13.9	3.1
Age 60-64	45.0	20.6	2.2
Age 65-69	80.0	31.7	2.5

Aside from death rates being higher among older applicants, several other factors were found to be associated with mortality. These factors are examined in Table 10. Applicants in more serious physical condition with disorders of a degenerative nature and poor prognosis were more likely to be deceased at time of follow-up. The only demographic factors which appeared to be associated with death were those closely associated with physical factors, namely, age and sex, with older males having the highest rate of mortality.

Health

At the time of follow-up, 47 percent of the applicants reported themselves to be in poor health, 36 percent reported their health to be "not so good," while 17 percent reported good health. Just over 50 per cent of the applicants said their condition had grown worse since their initial application. On the other hand, 46 percent spent fewer than seven days in bed during 1966 and an additional 19 percent spent less than a month. Twenty percent spent one to three months in bed while the remaining 15 percent were confined to bed over three months in 1966. This compares to a national average of about six days per person per year.[6]

Table 10

Proportion of Applicants Deceased at Time of Follow-up by Selected Characteristics

Selected Characteristics	Proportion of applicants deceased %	Total applicants N
Initial Disability Determination		
Allowed	17.2	424
Denied	4.2	281
Degree of Physical Limitation		
Slight	3.9	103
Moderate	10.8	223
Severe	15.8	265
Very severe	33.7	104
Prognosis for Control of Disorder		
Controllable with supervision	4.3	70
Liable to complications	20.2	163
Improvable only through best known methods	12.8	203
No improvement possible	21.9	96
Primary Diagnosis		
Disorders of circulatory system except arteriosclerotic heart disease	30.1	83
Arteriosclerotic heart disease	25.2	139
Hemiplegia	21.7	23
Emphysema	18.2	33
Bronchitis	15.1	53
Allergic, endocrine, metabolic, nutritional	8.7	23
Mental, psychoneurotic and personality disorders	8.2	61
Arthritis and rheumatism	7.7	104
Other diseases of bones and organs of movement	2.5	120
All other diagnoses	10.0	150
Sex		
Male	16.4	543
Female	10.5	162

A full 27 percent had seen a doctor or visited a clinic or hospital within a week of the interview while an additional 21 percent had done so within a month. Forty-seven percent had been hospitalized at least once since the initial study, and 25 percent had been hospitalized at least twice. Stated another way for the purpose of contrast, while the general population experienced 153 hospitalizations per 1,000 persons during 1965,[7] this disabled population had a rate of 253 per 1,000 persons in 1965. In 1966 the rate was 263 or 1.7 times greater than the general population. This reflects the rather heavy use of medical facilities by disabled people. However, there is a fairly large segment who appear to under-utilize medical facilities. Seventeen percent had not seen a doctor or visited a clinic or hospital in over six months. A special study of these under-utilizers was carried out to explain their behavior. It was found that subjects with low income, subjects who had to rely on public clinics, and subjects with negative attitudes toward public agencies were most likely to fail to seek care in spite of self perceptions of poor health.[8]

Several indicators of health are examined in association with social and demographic variables in Table 11. Looking first at subjects reporting poor health, with but a few exceptions, no drastic differences exist among applicants. Some differences, however, can be noted in relation to age, income, and etiology and nature of the primary disorder.

Quite unexpectedly the youngest age group, under 45, has the largest proportion reporting poor health (55.4%) and the oldest age group, 65-69, has the smallest proportion (22.8%). These are, of course, subjective reports, and it may well be that people of different ages have different conceptions as to what constitutes good health.

Table 11

Health Indicators by Social and Demographic Characteristics of Applicants

Characteristics of Applicants	Proportion reporting poor health %	Proportion reporting health grew worse %	Proportion with 2 or more hospitalizations %	Proportion with more than 7 days in bed in 1966 %	Total applicants N
Age					
Less than 45	55.4	47.7	29.2	66.2	65
45-49	53.3	53.2	29.0	64.5	62
50-54	50.6	48.2	27.0	50.6	81
55-59	52.6	53.4	20.4	55.1	118
60-64	38.4	53.6	23.0	53.6	125
65-69	22.8	37.2	14.3	34.3	35
Sex					
Male	47.4	50.4	25.7	52.1	365
Female	45.5	51.2	23.1	64.5	121
Race					
White	46.1	51.5	25.8	54.5	426
Negro	51.7	43.3	18.3	60.0	60
Present Personal Income					
Less than $50 per month	54.0	45.9	29.7	56.8	37
$50-99	45.1	50.8	14.8	60.4	106
$100-149	57.1	59.6	27.8	57.2	119
$150-199	44.9	44.9	23.4	53.4	60
$200-299	47.1	48.2	25.3	56.1	91
$300 or more	29.0	45.5	23.7	41.6	55
Initial Agency Determination					
Allowed benefits initially	50.5	51.2	27.3	56.2	281
Denied benefits initially	42.0	49.7	22.0	46.3	205
Final Outcome of Application					
Allowed benefits	50.4	52.3	27.5	57.5	317
Denied benefits	40.1	47.3	20.7	50.9	169

Table 11--Continued

Characteristics of Applicants	Proportion reporting poor health %	Proportion reporting health grew worse %	Proportion with 2 or more hospitalizations %	Proportion with more than 7 days in bed in 1966 %	Total applicants N
Etiology of Primary Disorder					
Degenerative	59.8	41.5	25.8	51.7	155
Trauma work connected	24.9	27.7	27.8	62.5	72
Trauma not work connected	9.1	41.0	35.3	67.7	34
Other	49.3	46.5	19.1	56.2	73
Unknown	56.6	60.5	23.7	52.0	152
Clinical Evaluation of Work Limitation					
Fit for work including old job	37.3	42.3	25.5	45.8	59
Fit for work excluding old job	35.8	45.1	20.8	41.6	53
Fit only under special conditions	33.3	33.2	23.8	47.7	21
Part time only	43.8	53.0	28.2	65.7	32
Not fit	51.7	53.5	26.2	68.6	321
Primary Disorder					
Chronic brain syndrome	44.3	45.0	15.0	74.1	20
Psycho-neurotic	70.0	55.0	10.0	45.0	20
Nervous system excluding above	55.0	52.8	17.6	44.2	34
Arteriosclerotic heart disease	50.0	43.3	29.0	55.3	76
Circulatory system excluding above	38.2	59.3	34.3	62.5	32
Arthritis and rheumatism	45.3	46.8	26.6	48.5	64
Displacement of disc	43.6	46.0	33.4	66.7	39
Musculo-skeletal excluding above	37.0	55.5	14.8	55.6	27
Bronchitis	58.4	55.4	16.7	58.4	36
All other disorders	40.6	52.9	15.9	65.1	138
All Cases	46.9	51.6	25.1	55.1	486

Older people may pass off health problems as a normal part of growing old. Moreover, it is likely that people assess their health in relation to the role expectations of their age status. The sudden drop in the proportion of those reporting poor health in the two oldest age categories (60-69) appears to bear this out. Before age 62 there is little excuse for not working aside from poor health or disability, and it is brought home to the individual each day as others his age go off to work. Not so, once a person reaches an age (62-65) where not working is a legitimate role without needing to be sick. Hence, the disabled once they reach retirement age may see themselves as improved and no different from their possibly more healthy peers. In point of fact, 28.6 percent of those 65 or more actually report improvement compared to 10.2 percent of those 60-64 and 18.1 percent of the total sample.

Turning to income, those with $300 or more income have a smaller proportion of subjects reporting poor health. This is no doubt because applicants who fall into this higher income category are mainly those who are employed and do probably enjoy better health, while those with less income are on benefits and have their condition brought home to them by virtue of their status.

As would be expected, subjects with disorders of a traumatic nature are less likely to report poor health (9.1 and 24.9%) than subjects with etiologies that are degenerative in nature (59.8%). With regard to specific disorders, subjects with bronchitis have the greatest proportion reporting poor health (58.4%) followed by those with nervous system disorders (55.0%) and arteriosclerotics (50.0%). One exception which appears to be a special case are subjects with psycho-neurotic disorders, among whom 70 percent report poor health. The high subjective nature of this perception, however, is born out by the other health indices. Despite this disproportionately high reporting of poor health, reported days in bed and hospitalizations are disproportionately lower than virtually every other diagnostic category.

Turning now to perceived changes in health since the initial study, 18 percent reported some improvement, 31 percent saw no change, while 51 percent said their health had grown worse. No particular characteristics identify those who grew worse (Table 11). Two slight exceptions to this are age and etiology of the disorder. In keeping with what was said earlier about the elderly having different perceptions of what constitutes good health, the elderly were also less likely to report their health as grown worse (37.2%) and as reported earlier more likely to report improvement. Also those with a traumatic etiology of a non-work nature were less likely to report worsening conditions (27.7%) than average (51.6%). This reflects the generally static condition of this type of disorder.

The next health index examined in Table 11 is frequency of hospitalization. Of the total study population, 25 percent had been hospitalized at least twice during the time between observations. Somewhat fewer, non-whites (18.3%), persons over 65 (14.3%), and persons with certain primary disorders were hospitalized that often. Only 14.8 percent of those with musculo-skeletal disorders, 17.6 percent of those with nervous system disorders, and 10.0 percent of the emotionally disturbed experienced two or more hospitalizations. The significance of this last statistic was mentioned previously. On the other hand, 29 percent of those under fifty, and 34 percent of those with circulatory ailments had at least two hospitalizations. Applicants with a displaced disc which is usually thought of as a static condition also had a high rate of hospitalization: 33.4 percent with two or more hospitalizations.

Days spent in bed during 1966 was another health indicator examined (Table 11). A total of 55.1 percent of the study group spent more than seven days in bed in 1966. Those who spent disproportionately more than this were the applicants under 50 (64-66%), females as opposed to males (52 vs. 64%), those with traumatic conditions (62-67%), the mentally disturbed (74.1%), and those with circulatory (62.5%) and back (disc) ailments (66.7%). Groups with a lower than average proportion (55%) with seven or more days in bed were the elderly (34.3%), the high income applicants (41.6%), those with diseases of the nervous system (44.2%), and the psycho-neurotics (45%).

As expected there is a straight line increase in days spent in bed with severity of clinical evaluation of work limitation. On the other hand, of those clinically evaluated in the initial study as fit for work including former job, 15 percent spent four or more months in bed and 30 percent spent a month or more in bed in 1966.

With respect to all four health indicators on Table 11, virtually no differences are noted between those initially allowed benefits and those denied, nor between those ultimately allowed and those denied. It is not necessarily suggested that those not on disability benefits are in general as sick or disabled as those on benefits, but rather there is probably some overlap; and, moreover, those denied benefits tend to perceive of themselves as just as sick and are hospitalized on the average about as often as those receiving benefits.

Physical Limitation

The degree of long term physical limitation was also assessed in the follow-up. Table 12 contrasts the degree of limitation initially with that reported years later. The pattern of percentages reveals a general levelling off with respect to physical limitation. For example, at the time of application for benefits, 23 percent were confined to the house or bed compared to 16 percent in the resurvey, and while 25 percent were not significantly limited in getting around initially, 33 percent had no such limitation in the second evaluation. It must be remembered, of course, that 15 percent of the applicants died in the interval, a good proportion of whom were the more seriously limited. Of particular interest are the applicants who indicate a dramatic change in their condition: those who had been confined to bed and are now not significantly limited, and those who were not significantly limited and are now confined to home or bed. A close examination of case records reveals that the most typical of the former are cases of arteriosclerotic heart disease and myocardial infarction with no further acute incidences, or cases of mild back injury. They are likely to be married with teenage children, and either still receiving disability benefits or in a very low paying job. The cases of dramatic increase in limitation are also typified by cardiovascular cases but cases which involved continued acute incidences, or by cases of degenerating pulmonary disorders. These cases appear to be somewhat older and living alone with spouse, receiving disability benefits, but with some other household income, such as an employed spouse.

Table 12

Degree of Physical Limitation Initially and at Time of Follow-up

Initially	Degree of Limitation at Follow-up										Total	
	1		2		3		4		5			
	f	%	f	%	f	%	f	%	f	%	f	%
1. In bed all or most of time	5	(10)	7	(15)	2	(4)	22	(46)	12	(25)	48 (10)	(100)
2. In house all or most of time	0	(0)	41	(61)	2	(3)	13	(19)	11	(16)	67 (13)	(100)
3. Needs help of another person to get around	0	(0)	2	(10)	5	(25)	10	(50)	3	(15)	20 (4)	(100)
4. Gets around by self but with difficulty	1	(.4)	15	(7)	2	(.8)	166	(73)	42	(19)	226 (47)	(100)
5. Not limited in the above ways	1		8		0		20	(17)	90	(76)	119 (25)	(100)
Total	7	(1)	73	(15)	11	(2)	231	(48)	158	(33)	480* (100)	(100)

Most cases, however, do not reflect a profound change in the degree of physical limitation, at least with respect to the ability to get around.

The change in limitation in specific areas of activity is examined in Tables 13 and 14. Rather surprisingly Table 12 reveals an increase in the proportion of cases perceiving limitation in personal care rather than a decrease, as revealed in Table 11. While only 12 percent saw themselves as moderate to severely disabled originally, 29 percent did so in the resurvey. Seventy-one percent felt no limitation in personal care at time of application compared to only 51 percent later. Twenty-one percent of those who initially felt no limitation now report moderate to severe limitation. The possibility exists that subjects were not yet aware of the degree of their actual limitation in personal care at the time of their application for benefits, or it may be that the years of disability tended to increase their dependency and hence their perceived limitation to take care of themselves. A special study of dependency and conjugal roles is reported elsewhere.[9] The contrasting trends that are revealed in Tables 11 and 12 may be explained by the fact that the "ability to get around" (Table 11) increases as one becomes adjusted to physical limitation and learns to make accommodations. But this may not be so with respect to specific tasks such as getting in and out of a bathtub.

Similar comparisons of a before and after nature are made in Table 14 with respect to limitation in general employment. In this area there also appears to be a general stabilizing with those seeing themselves as only slightly limited formerly now tending to see themselves as moderate to severely limited. Most variation in limitation, however, is of a one step nature, such as between moderate-severe, and severe-totally.

Table 13

Degree of Limitation Initially and at Time of Follow-up in Personal Care Such as Toilet and Dressing

Initially	Limitation in Personal Care at Follow-up								Total Cases	
	None		Slight		Moderate		Severe			
	f	%	f	%	f	%	f	%	f	%
None	198	(58)	69	(20)	53	(15)	22	(6)	342 (71)	(100)
Slight	31	(36)	17	(19)	27	(31)	11	(12)	86 (18)	(100)
Moderate	18	(37)	9	(18)	11	(23)	10	(21)	48 (10)	(100)
Severe	2	(25)	1	(13)	2	(25)	3	(38)	8 (2)	(100)
Total Cases	249	(51)	96	(20)	93	(19)	46	(10)	484 (100)	(100)

Table 14

Degree of Physical Limitation Initially and at Time of Follow-up in General Employment

Initially	Degree of Limitation in Employment at Follow-up						Total Cases
	None/Slight		Moderate/Severe		Totally		
	f	%	f	%	f	%	f
None/Slight	2	(6)	17	(50)	15	(44)	34 (7)
Moderate/Severe	7	(8)	57	(64)	25	(28)	89 (19)
Totally	8	(2)	164	(46)	182	(52)	354 (74)
Total Cases	17	(4)	238	(50)	222	(46)	477 (100)

Table 15 examines such change in reported employment limitation on several social and demographic dimensions.

Table 15

Change in Perception of Employment Limitation by Selected Variables

Selected Variables	Perception of Employment Limitation			All Cases
	Less than formerly %	No Difference %	More than formerly %	N
Sex				
Male	18.7	46.2	35.1	359
Female	20.3	39.8	39.8	118
Race				
White	17.9	46.5	35.6	419
Non-white	27.6	31.0	41.4	58
Age				
Less than 45	33.3	36.5	30.1	63
45-49	16.0	42.0	42.0	62
50-54	26.6	43.0	30.4	79
55-59	13.8	50.9	35.3	116
60-64	12.9	41.1	46.0	124
65-69	21.2	60.6	18.2	33
Pre-disability Income from Personal Work				
Less than $200 per month	22.6	32.1	45.2	84
$200-299	18.4	50.0	31.6	114
$300-399	23.0	41.0	36.0	100
$400-499	18.4	46.5	35.1	114
$500 or more	10.8	53.8	35.1	65
Initial Decision				
Allowed benefits	11.9	49.5	38.6	277
Denied benefits	28.9	37.8	33.3	201
Final Outcome of Decision				
Allowed benefits	13.0	50.6	36.3	314
Denied benefits	30.7	32.5	36.2	163
Present Employment				
No	12.0	47.6	40.4	416
Yes	68.3	23.3	8.3	60

Table 15--Continued

Selected Variables	Perception of Employment Limitation Less than formerly %	 No Difference %	 More than formerly %	All Cases N
Etiology of Primary Disorder				
Infectious, parasitic	28.6	28.6	42.8	14
Endocrine, metabolic, nutritional	25.0	25.0	50.0	16
Degenerative	16.3	48.9	34.6	153
Traumatic--work connected	22.2	47.2	30.5	72
Traumatic--not work connected	20.6	41.2	38.2	34
Other and unknown	17.6	47.0	35.3	187

Looking first at those who see themselves as less limited than formerly, the same proportion prevails among both males and females and no pattern is apparent with respect to age except that once again there seems to be a shift at age 65. A larger proportion of non-whites (27.6%) see themselves as less limited than whites (17.9%). Those with lesser pre-disability income appear somewhat more likely to see themselves less limited than those with greater income. Those who were denied benefits initially and by time of follow-up (28.9-30.7%) were more likely to report a decrease in limitation than those granted benefits (11.9-13.0%). The most dramatic difference was found with respect to employment status. As expected 68 percent of those employed reported a decrease in employment limitation compared to 12 percent of the unemployed. With respect to etiology, greater likelihood of improvement was found among impairments of infectious, parasitic, endocrine, metabolic, nutritional, and injury-connected disorders than among impairments of a degenerative and other nature.

Increases in employment limitations appeared to be greater among non-whites, persons with very low pre-disability income, the unemployed, and subjects with impairments of an infectious, parasitic, endocrine, metabolic, and nutritional nature.

Physical Dependency

Efforts were made to determine the extent to which former applicants were dependent on others for activities involving personal care. Table 16 points up that better than one in three subjects need help in bathing, 13.2 percent in getting out of bed, 10.5 percent in getting around the house, and 15.8 percent in getting around outside. In all, 32.9 percent need some kind of help.

Table 16

Proportion Requiring Help of Others in Personal Activities

Personal Activities	Proportion Requiring Help f	%	Total Applicants
Bathing	102	37.2	486
Getting out of bed	64	13.2	486
Getting around the house	51	10.5	486
Getting around outside	77	15.8	477*

*Excludes 9 applicants who do not get out of the house.

Table 17 was prepared to determine any particular characteristics of those in need of personal help. Those less than 45 were more likely to need help than any other socio-demographic category (41.5%). This points up the greater severity of limitation found among the very young applicants.

Table 17

Applicants in Need of Help of Others by Selected Characteristics

Selected Characteristics	Proportion needing help in bathing %	Proportion needing help in bathing, getting out of bed and/or getting around %	Total cases N
Age			
Less than 45	32.3	41.5	65
45-49	14.5	24.1	62
50-54	19.7	32.0	81
55-59	22.0	38.1	118
60-64	19.2	29.6	125
65-69	17.1	28.5	35
Sex			
Male	22.4	32.0	365
Female	16.5	35.5	121
Race			
White	19.4	32.1	426
Negro	31.6	38.3	60
Initial Determination			
Allowed benefits	22.4	36.3	281
Denied benefits	19.0	28.3	205
Final Outcome of Application			
Allowed benefits	23.3	36.0	317
Denied benefits	16.4	27.2	169
Etiology of Primary Disorder			
Degenerative	16.8	29.0	155
Trauma--work connected	27.7	38.8	72
Trauma--not work connected	20.6	29.4	34
Unknown	24.4	38.1	152
Other	20.0	26.2	61
Primary Disorder			
Chronic brain syndrome	20.0	40.0	20
Psycho-neurotic	35.0	50.0	20
Nervous system excluding above	26.5	44.1	34
Arteriosclerotic heart disease	18.4	27.6	76
Circulatory system excluding above	18.8	25.0	32
Arthritis and rheumatism	17.2	35.9	64
Displacement of disc	28.2	30.7	39
Musculoskeletal excluding above	25.9	29.6	27
Bronchitis	11.1	19.4	36
All other	21.0	34.8	138
All Cases	21.0	32.9	486

The only other source of variation in the need for help of others is in the nature of the disorder. As would be expected, subjects with conditions which do not generally involve limitation of movements are less likely to be dependent on others. For example, only 19.4 percent of those whose major disorder is bronchitis need the help of others compared to 44.1 percent of those with nervous system disorders where paralysis is the typical residual impairment, and 35.9 percent of the arthritic. One of a few exceptions to this pattern is found among those with psychoneurotic disorders where 50.0 percent report the need of help of others. Of course, not all of this dependency can be attributed to the mental disorder, since there may be in some cases a second disorder which is limiting.

Compliance with Medical Advice

The follow-up study provided an opportunity to gather information regarding the degree of acceptance of medical advice. This type of information was collected in both the applicant and female spouse interviews making it possible to compare the extent of compliance of a disabled population with a "normal" female population. These comparisons are presented in Table 18. The disabled population do not appear to behave much differently than the "normal" population. Of course, they come from virtually the same households. The disabled do appear, however, to be more inclined to ignore advice to quit smoking (68.6 vs. 78.6%) and to accept advice with respect to surgery (33.6 vs. 24.0%). Quitting smoking is the area of least compliance for both groups while visiting a specialist is the area of greatest compliance.

Table 18

Failure to Accept Medical Advice Among Applicants and Female Spouses

Type of Advice	Applicants		Spouses	
	Proportion ignoring advice %	Total receiving advice N	Proportion ignoring advice %	Total receiving advice N
Referral to specialist	4.8	166	4.5	44
Submit to surgery	33.6	119	24.0	50
Buy or replace eye glasses	12.5	176	7.1	56
Buy or replace hearing aid	60.0	20	50.0	4
Change diet	12.5	184	8.3	60
Quit smoking	68.6	153	78.6	28
Buy or replace artificial limb or brace	9.7	113	(Not asked)	
Quit work	8.2	171	(Not asked)	
Move to different climate	92.8	42	(Not asked)	

Mental Health

The initial study included an assessment of the mental health of applicants. This assessment was based upon a battery of tests administered by the psychologist and a clinical judgment made by him on the basis of the tests and personal interview. It seemed desirable to attempt some sort of mental health evaluation in the follow-up, but the battery of tests and clinical evaluation were not feasible. As a compromise, an instrument was prepared composed of six psychiatric symptoms contained in the initial battery of tests which correlated most strongly with the psychologist's diagnosis of psycho-neurotic disorder. It is not suggested that responses to these six items can be used as evidence of a psychiatric disorder, but certainly those scoring high on the six items, admitting to fear, depression, irritation, nervousness, and the like, can be taken as reflecting a disturbed mental state.

Responses to each of the items are presented in Table 19. Statistically the most popular psychiatric symptom is feeling keyed up, nervous or tense (51% "very much like me") followed by "thinking about things that bother me" (28%). The item with the least endorsement is being "easily frightened or having many fears" (8%).

A total score was figured for each respondent by scoring responses of each item listed in Table 19 as 0 through 3 and totalling the score of each item for each respondent. "Not at all like me" was scored zero and "Very much like me" was scored 3 with intermediate responses being assigned values 1 and 2. Table 20 provides a distribution of the total scores generated in this manner. A score of eleven or more was arbitrarily taken as a cut-off point to identify those whose responses reflected a significant emotional problem. To score eleven a respondent would have to agree that at least four to five of the six symptoms tend to describe his behavior. Thirty-one percent of the respondents fall into this category. Table 21 examines factors associated with a poor mental state.

The sudden drop in the proportion in poor mental health at age 65 strengthens our belief mentioned earlier in this chapter that the availability of the retirement status as an alternative to a sick or disabled status has a favorable influence upon applicants. Only 8.7 percent of those 65-69 fall in the poor mental health category compared to 31 per cent of the total sample.

Table 19

Responses to Psychiatric Symptoms Among Applicants

Psychiatric Symptoms	Applicant Responses									
	"Not at all like me"		"Very little like me"		"Somewhat like me"		"Very much like me"		Total Cases	
	f	%	f	%	f	%	f	%	f	%
"I frequently feel keyed up, nervous or tense"	50	(11)	49	(11)	131	(27)	244	(51)	480	(100)
"I make little troubles into big ones in my head"	218	(46)	92	(19)	89	(19)	79	(16)	478	(100)
"I am easily irritated or annoyed"	145	(31)	107	(22)	120	(25)	107	(22)	479	(100)
"I am often depressed or unhappy"	162	(34)	97	(20)	129	(27)	90	(19)	478	(100)
"It is hard for me to stop thinking about things that bother me"	128	(27)	93	(19)	122	(26)	136	(28)	479	(100)
"I am easily frightened or have many fears"	319	(66)	66	(14)	57	(12)	36	(8)	478	(100)

Table 20

Total Scores on the Mental Health Scale

Mental Health Score	Frequency and Percent f	%
0 (all items endorsed as "not at all like me")	30	6.2
1-2	29	6.0
3-4	56	11.5
5-6	70	14.4
7-8	79	16.2
9-10	66	13.6
11-12	63	13.0
13-14	45	9.3
15-16	21	4.3
17-18	20	4.1
No data	7	1.4
Total Cases	486	100.0

Table 21

Proportion of Applicants Scoring Eleven or More on Mental Health Scale (Poor Mental Health) by Selected Variables

Selected Factors	Proportion with "Poor" Mental Health %	All Cases N
Age		
Less than 45	32.8	58
45-49	25.8	62
50-54	37.0	81
55-59	31.3	118
60-64	35.2	125
65-69	8.7	35
Sex		
Male	28.7	365
Female	36.4	121
Race		
White	31.7	426
Non-white	23.3	60
Education		
Less than five years	36.0	89
6-8 years	30.4	204
9-11 years	28.8	111
12 years (high school)	28.8	59
More than twelve (some college)	26.0	23
Pre-disability Personal Income		
Less than $150 per month	38.1	42
$150-199	17.5	40
$200-299	33.3	114
$300-399	27.6	105
$400-499	32.5	117
$500 or more	31.3	67
Present Personal Income		
Less than $50 per month	43.2	37
$50-99	31.1	106
$100-149	33.6	119
$150-199	31.7	60
$200-299	27.5	91
$300-399	22.0	32
$400 or more	17.4	23

Table 21--Continued

Selected Factors	Proportion with "Poor" Mental Health %	All Cases N
Present Household Income		
Less than $100 per month	38.0	58
$100-149	38.1	63
$150-199	24.0	50
$200-299	34.0	101
$300-399	22.1	68
$400-499	25.0	32
$500 or more	30.0	58
Applicant's Evaluation of Present Health		
Very poor	43.5	92
Poor	35.4	136
Not so good	28.7	168
Good	14.1	85
Applicant's Evaluation of Present Physical Limitation		
Confined to house or bed	46.3	80
Needs help of others to get around or gets around with considerable difficulty	31.3	243
Not limited in the above ways	22.6	159
Applicant's Evaluation of Handicap in General Employment		
Total handicap	34.5	356
Severe	23.4	47
Moderate	21.4	42
None or slight	11.7	34
Help Needed Bathing		
Great deal of help	55.5	18
Some help	33.3	84
No help	29.0	384
Present Employment		
Not employed	33.7	424
Employed	9.8	61
Initial Decision		
Allowed benefits	30.3	281
Denied benefits	31.2	205

Table 21--Continued

Selected Factors	Proportion with "Poor" Mental Health %	All Cases N
Final Outcome of Decision		
Allowed benefits	30.9	317
Denied benefits	30.2	169
Primary Disorder		
Chronic brain syndrome	25.0	20
Psycho-neurotic	100.0	20
Nervous system excluding above	41.2	34
Arteriosclerotic heart disease	25.0	76
Circulatory system excluding above	21.9	32
Arthritis and rheumatism	31.2	64
Displacement of disc	30.8	39
Musculoskeletal excluding above	37.0	27
Bronchitis	41.7	36
All other	29.7	138
All Cases	30.7	486

Perhaps the most interesting relationships are evident with respect to household and personal income. First it is necessary to clearly identify these items. Household income refers to all income from any source that is counted as household income. This would include wage income of the applicant and his spouse, as well as contributions of other family members. It also includes household income from other sources, such as rent, pensions, and welfare benefits. Pre-disability personal income refers to wage income of the applicant only. However, present personal income refers to any income or money source paid directly to the applicant, such as wages (in only a few cases), disability benefits, retirement benefits, public welfare, and the like. In a sense, for most people, it consists of wage replacement of one form or another.

No apparent relationship exists between personal (wage) income before disability and mental health. This we suggest means that in general people are fairly well adjusted to their level of income. After disability at time of follow-up, however, a definite straight line relationship exists between (wage replacement) personal income level and mental health. Of those with present personal income of less than $50 per month, 43.2 percent fall in the poor mental health category compared to only 17.4 percent of those with $400 or more personal income. This suggests that after disability income maintenance is an important factor in the maintenance of mental health. But the important factor appears to be direct income replacement and not just availability of money, for no relationship appears to exist between mental health and household income. In other words, it is the existence and/or amount of money available directly to the applicant that appears to be important with the crucial element being the degree of independence. This sort of interpretation is supported by other apparent relationships. Only 9.8 percent of those with some sort of employment fall into the poor mental health category compared to 33.7 percent of the unemployed. Categories with the greatest proportions in poor mental health are those confined to the house or bed (46.3%), those who perceive their health as poor (43.5%), and those who need a great deal of help bathing (55.5%).

The over-all patterns revealed in Table 21 would suggest a rather simple straight line relationship between the physical and mental condition of applicants, and they are no doubt related, but intervening variables do appear to be important. For example, the very dramatic relationship between present personal income and mental health reflects something more. For the most severely disabled do not fall at the lower end of the income range where the larger proportions of the mentally disturbed are found but rather in the middle because their claims have been legitimated and they are receiving benefits of $100 or more. We suggest, then, that it is not necessarily disability per se that relates to poor mental health, but disability with a high degree of dependency. In further evidence, the group with the highest proportion in poor mental health, with one exception, are those in need of a great deal of help in bathing (55.5%). The one exception, of course, are those originally diagnosed as psycho-neurotic where all 20 or 100 percent of the cases fall in the poor mental health category. This is indeed strong evidence for the validity of the mental health scale constructed for the home interview.

Summary

This chapter reports on efforts to assess the continuing health of disability applicants long after their association with the disability determination agency. Perhaps the most significant factor is that in the interval 15 percent had died. The death rate was found to be four times greater than average at ages 50-54 among disability applicants and 2.5 times greater at ages 65-69.

Among the survivors, 47 percent reported themselves to be in poor health in contrast to 8 percent among wives of applicants. While 46 per cent spent less than a week in bed in 1966, 15 percent were confined to bed for a period of over three months. A full 27 percent had seen a doctor or visited a clinic or hospital within a week of the interview. Twenty-five percent had been hospitalized at least twice since the initial study and nine percent as many as four times or more. The rate of hospitalization in this disabled population in 1966 was 1.7 times that of the general population. Very few factors differentiated well with respect to varying health conditions whether measured in terms of subjective evaluation, hospitalization, or days of bed confinement. In general, older applicants appeared to differ from younger ones, and the chronically ill from those with traumatic conditions.

With respect to physical limitation, little significant change appeared to take place. However, there was an increase in the proportion of cases perceiving limitation in personal care. While only 12 percent saw themselves as moderate to severely limited originally, 29 percent did so in the resurvey. On the other hand, there appeared to be a decrease in inability to get around. This was explained as due to the fact that the "ability to get around" probably increases as a person learns to make accommodations for his limitations, but perhaps not so with specific tasks such as getting in and out of a bathtub. Dependency on others was greatest among those whose conditions involved a limitation of movement, but unexpectedly a disproportionately large number of those with mental disorders needed the help of others in personal care.

Compliance with medical advice was also examined. Advice to quit smoking was the most likely to be ignored (68.6%) followed by buying or replacing a hearing aid (60.0%), submitting to surgery (33.6%), buying or replacing eye glasses (12.5%), changing diet (12.5%), and seeing a specialist (4.8%).

Based upon an especially constructed mental health index, roughly thirty percent of the study group were classified as having "poor"mental health. Significantly lower proportions of poor mental health were found among those employed (9.8%), those over 65 (8.7%), and those with a substantial personal income (17.4%). We suggested that what these groups had in common which is conducive to good mental health was a role more acceptable than the sick role, namely work or retirement, and independence in the form of substantial direct income.

CHAPTER IV

THE ECONOMICS OF DISABILITY

The social security disability program is basically an income replacement program for those who are unable to work because of a health condition. Those who are granted benefits after consideration of application are insured of at least a portion of their former income until their death. Those who are denied benefits have no such assurance and must look elsewhere for income maintenance: gainful employment, reliance on other household members, or upon some public agency other than social security. Moreover, even for those receiving disability benefits, a good deal of economic adjustment is necessary, for less than half of their former work income is replaced in disability benefits. The economic adjustment of all applicants and factors related to it are the subject of this chapter.

Personal Income Replacement

Table 22 lists monthly personal income for three points in time. That is, income prior to application for benefits, at time of application, and at time of follow-up two and one-half to five years after application for benefits. The first two incomes represented are income received from work or business while the third of follow-up income represents primarily replacement income such as disability benefits, workmen's compensation, welfare payments, and the like. Personal income is defined as income received directly by the applicant whether as salary or benefits from some agency.

Table 22

Personal Income (all sources*) Before Disability, At Time of Application, and At Time of Follow-up

Monthly Personal Income	Before Disability f	Before Disability %	At Time of Application f	At Time of Application %	At Follow-up f	At Follow-up %
Less than $50	1	0.2	475	97.8	37	7.6
$50-$99	7	1.4	3	0.6	106	21.8
$100-$149	34	7.0	1	0.2	119	24.5
$150-$199	40	8.2	1	0.2	60	12.3
$200-$299	114	23.5	--	--	91	18.7
$300-$399	105	21.6	--	--	32	6.6
$400-$499	117	24.1	--	--	10	2.1
$500 or more	67	13.8	2	0.4	13	2.7
No data	1	0.2	4	0.8	18	3.7
	486	(100.0)	486	(100.0)	486	(100.0)
Median Monthly Income	$350		--		$192	
Average Monthly Income	$343		--		$169	

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*Such as disability benefits, retirement benefits, workmen's compensation, employment wages, and the like.

A glance at the pre-disability income in Table 22 reveals that before disability this population had in general a relatively low income. Forty percent of the applicants had incomes of less than $300 per month and only 13.8 percent had incomes of $500 or more per month. This relatively low income among applicants for disability has at least two explanations. To begin with, it is likely that some applicants had suffered a decrease in income some time before they actually applied for benefits. Moreover, health conditions are more likely to be disabling for persons in low income occupations.

However, if the situation of applicants is poor before disability, it is much worse after disability. By the time of follow-up, 29.4 percent had incomes of less than $100 per month, and a full 84.9 percent had incomes of less than $300 per month. This is seven times as many as before disability. The median income before disability was $350 per month compared to $192 two and one-half to five years after disability. Average monthly incomes were less: $343 per month before disability and $169 per month after disability. This represents an average reduction in personal income of 51 percent.

Table 23 examines monthly personal income by major source of that income. Among those who rely primarily on social security disability benefits, 24 percent have a monthly income of less than $100. This compares to 39.4 percent among the retired, 3.7 percent among the employed, and 46.8 percent with incomes less than $100 among those relying primarily on some other income such as workmen's compensation. Average monthly income is $166 for the disabled, $134 for the retired, $321 for the working, and $153 for those with other major income source. As expected, among the few with employment income, income is relatively high.

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Table 23

Major Source of Income by Present Personal Income

Monthly Income	Disability Benefits		Retirement Benefits		Working		Other	
	f	%	f	%	f	%	f	%
Less than $50	2	0.6	0	--	0	--	7	14.9
$50-$99	76	23.4	13	39.4	2	3.7	15	31.9
$100-$149	103	31.7	9	27.2	2	3.7	5	10.6
$150-$199	44	13.6	2	6.1	7	13.0	7	14.9
$200-$299	71	21.9	3	9.1	13	24.1	4	8.5
$300-$399	14	4.3	2	6.1	12	22.2	4	8.5
$400-$499	2	0.6	0	--	5	9.2	3	6.4
$500 or more	5	1.5	0	--	8	14.9	0	--
No data	7	2.2	4	12.1	5	9.2	2	4.3
	324	(100.0)	33	(100.0)	54	(100.0)	47	(100.0)
Median Income	$139		$120		$327		$125	
Average Income	$166		$134		$321		$153	

The relatively lower income of the retired as opposed to the disabled reflects the lower benefits of early retirement of some applicants not found sufficiently disabled for disability benefits; or for others, reduced benefits resulting from reduced earnings prior to retirement.

Table 24 looks at actual change in personal income from before onset of disability to the present. Only eleven applicants or 2.4 percent realized an increase over the two and one-half to five years. 6.6 percent experienced no substantial change, while about 35 percent experienced a substantial loss and 55 percent a considerable loss (about $200 per month).

As reported in Chapter II, 43 percent of applicants had more than one source of personal income, the most common combination being disability benefits and workmen's compensation. With this multiple source of income, it might be expected that more applicants would experience an increase in income, or at least would not suffer a loss. This is the case only among the few who are working, where a substantial proportion reported a gain in income (10.2%), or no substantial loss (28.6%). Among those on disability benefits only 1.6 percent actually experienced a gain as did only 3.6 percent of the retired. Moreover, few in any category of major income did not suffer a loss of income irrespective of the number of sources. That is, 94.9 percent of those on disability benefits, 89.3 percent of the retired, as well as 61 percent of the employed experienced loss of income. Serious loss of income (about $200 per month) was found among all applicants: 57.7 percent of the disabled, 64.3 percent of the retired, 20.3 percent of the working, and 62.2 percent of those with other income. In general, a drastic reduction in personal income is evident for most applicants, and clearly no danger exists that disabled workers profit from disability through multiple benefits and/or other sources of income.

Table 24

Major Source of Income by Change in Personal Income

Monthly Income*	No Income f	No Income %	Disability Benefits f	Disability Benefits %	Retirement Benefits f	Retirement Benefits %	Working f	Working %	Other f	Other %	All Cases f	All Cases %
Gain of $50-$300	--	--	5	1.6	1	3.6	5	10.2	--	--	11	2.4
No change in income	1	3.6	11	3.5	2	7.1	14	28.6	3	6.7	31	6.6
Loss of $50-$200	2	7.1	42	13.2	6	21.4	11	22.5	12	26.7	73	15.6
Loss of $100-$300	6	21.4	76	24.0	1	3.6	9	18.4	2	4.4	94	20.1
Loss of $200-$400	12	42.9	87	27.4	6	21.4	6	12.2	9	20.0	120	25.7
Loss of $300-$500	3	10.7	63	19.9	9	32.2	3	6.1	11	24.4	89	19.1
Loss of $400-$600	4	14.3	33	10.4	3	10.7	1	2.0	8	17.8	49	10.5
All Cases	28	100.0	317	100.0	28	100.0	49	100.0	45	100.0	467**	100.0

*Categories overlap because of the manner in which present income levels were determined.

**19 cases where income data were insufficient excluded.

Household Income

Household income is defined as income from any source that is shared in common with the head of the household and the rest of the household members which is used to meet household needs and intended for the general use and welfare of the household. From an operational standpoint, it in-includes all of the following: the personal income of the applicant of any source, such as wages, retirement or disability payments, rental on property, and the like; and income of any family member, such as wages or board, ADC payments, welfare allowances, and the like.

In reality, for many disabled families, the personal income of the applicant is the only household income. Table 25 briefly summarizes the relation between household and personal income of applicants. In 51.3 per cent of the cases, there is no additional household income, while in 21.3 percent, the additional household income is less than $100 per month. On the other hand, in 17.6 percent of the cases, the additional income reaches $200 or more.

It would appear from Table 25 that supplemental household income is not routinely a substitute for lack of or loss of personal income. For example, among those with less than $100 personal income, 45.1 percent have no supplemental income of any kind. Likewise of those with personal incomes less than $300, 54 to 55 percent have no supplemental household income.

Table 26 details the change in household income over the course of disability. Prior to disability, 27.7 percent of the households of applicants had incomes of less than $300 compared to 68.6 percent at time of application and 56.0 percent at time of follow-up. Thirty and eight-tenths percent had household incomes of $500 or more before disability compared to 6.0 percent at time of application for benefits and 11.9 percent at time of follow-up.

Table 25

Monthly Personal Income of Applicants by Supplemental Household Income

Personal Income	Household Income										Total Cases	
	None		Less than $100		$100-$199		$200-$299		$300 or more			
	f	%	f	%	f	%	f	%	f	%	f	%
None	3	11.5	2	7.7	2	7.7	7	26.9	12	46.2	26	100.0
Less than $100	46	45.1	28	27.5	13	12.7	4	3.9	11	10.8	102	100.0
$100-$199	88	54.3	32	19.8	19	11.7	7	4.3	16	9.9	162	100.0
$200-$299	48	55.8	22	25.6	5	5.8	6	7.0	5	5.8	86	100.0
$300-$399	18	60.0	4	13.3	1	3.3	7	23.4	--	--	30	100.0
$400 or more	16	76.2	3	14.3	2	9.5	--	--	--	--	21	100.0
	219	51.3	91	21.3	42	9.8	31	7.3	44	10.3	427*	100.0

*Excludes 59 cases lacking in sufficient income information.

Table 26

Household Income Before Disability, at Time of Application, and at Time of Follow-up

Monthly Household Income	Before Disability f	Before Disability %	At Time of Application f	At Time of Application %	At Follow-up f	At Follow-up %
None	0	--	22	4.5	10	2.1
Less than $50	0	--	26	5.3	2	0.4
$50-$99	6	1.2	76	15.6	46	9.5
$100-$149	22	4.5	67	13.8	63	12.9
$150-$199	32	6.6	63	12.9	50	10.3
$200-$299	75	15.4	80	16.5	101	20.8
$300-$399	90	18.5	47	9.7	68	14.0
$400-$499	112	23.0	28	5.8	32	6.6
$500 or more	149	30.8	29	6.0	58	11.9
No data	0	--	48	9.9	56	11.5
	486	(100.0)	486	(100.0)	486	(100.0)
Median Monthly Income	$408		$197		$275	
Average Monthly Income	$394		$207		$269	

As would be expected, household income is greatest among married female applicants where a male breadwinner (other than the applicant) is available to make the major contribution to the household income (Table 27). Seventy-four percent of married females have personal incomes of less than $100, but 43 percent live in households with $400 or more per month income.

The implications of the level of household income are somewhat lost unless the number of household members is taken into account. Table 28 does this. It shows household income levels for various household sizes up to seven or more members. Worthy of special note is the fact that 47.6 percent of those living alone have incomes of less than $100 per month, 36.1 percent of couples have incomes of less than $200 per month, and 49.3 percent of three-member households have less than $300 per month or $3,600 per year income. Moreover, 38.9 percent of the four-member households and 59.1 percent of the five-member households reportedly live on less than $3,600.

Source of Household Income

By far the most common and significant source of household income in addition to that which accrues to the applicant is employment of the spouse. Table 27 has already demonstrated the significance of male spouse contributions among married female applicants. Table 29 traces the working status of female spouses. Even before onset of applicant disability 29.1 percent of wives of married applicants were employed and contributing to household income. About 2 percent quit working and about 8 percent started working at time of onset. By the time of follow-up 44 percent of the wives were employed.

Table 27

Personal and Household Income by Sex and Marital Status

Monthly Income	Sex and Marital Status					
	All Males		Married Females		Unmarried Females	
	f	%	f	%	f	%
Personal Income						
Less than $50	12	3.4	19	35.2	6	9.5
$50-$99	52	14.8	21	38.9	33	52.4
$100-$199	151	43.0	11	20.4	17	27.0
$200-$299	84	23.9	2	3.7	5	7.9
$300-$399	29	8.3	1	1.8	2	3.2
$400-$499	10	2.9	--	--	--	--
$500 or more	13	3.7	--	--	--	--
Total	351[a]	100.0	54	100.0	63[c]	100.0
Household Income						
Less than $50	9	2.7	--	--	3	5.8
$50-$99	19	5.8	--	--	27	51.9
$100-$199	92	28.0	8	16.7	13	25.0
$200-$299	85	25.8	9	18.7	7	13.5
$300-$399	56	17.0	10	20.9	2	3.8
$400-$499	23	7.0	9	18.7	--	--
$500 or more	45	13.7	12	25.0	--	--
Total	329[a]	100.0	48[b]	100.0	52[c]	100.0

[a] From a total of 365 males. Cases lacking sufficient income data are excluded.

[b] From a total of 54 married females. Cases lacking sufficient income data are excluded.

[c] From a total of 67 unmarried females. Cases lacking sufficient income data are excluded.

Table 28

Household Income by Size of Household

Monthly Income	Size of Household														
	One Member		Two Members		Three Members		Four Members		Five Members		Six Members		Seven or More		All Cases
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f
Less than $100	39	47.6	11	7.0	1	1.4	4	7.4	1	4.5	1	5.6	0	--	58
$100-$199	31	37.8	46	29.1	19	26.8	7	13.0	2	9.1	6	33.3	2	8.0	113
$200-$299	11	13.4	41	26.0	15	21.1	10	18.5	10	45.5	3	16.7	11	44.0	101
$300-$399	1	1.2	25	15.8	12	16.9	15	27.8	4	18.2	4	22.2	8	32.0	68
$400-$499	0	--	13	8.2	10	14.1	5	9.2	1	4.5	0	--	3	12.0	32
$500-$599	0	--	7	4.4	5	7.0	4	7.4	1	4.5	3	16.7	1	4.0	21
$600 or more	0	--	15	9.5	9	12.7	9	16.7	3	13.7	1	5.6	0	--	37
All Cases	82	(100)	158	(100)	71	(100)	54	(100)	22	(100)	18	(100)	25	(100)	430

Table 29

Working Status of Spouse

Work Status of Spouse	Proportion f	Percent of married applicants N=343 %	Percent of all applicants N=486 %
Working before onset of husband's disability	119	29.1	24.5
Quit work at onset of husband's disability	9	2.6	1.8
Started working at onset of husband's disability	40	11.7	8.2
Total working immediately following onset of husband's disability	150	43.7	30.8
Quit work by time of follow-up	35	10.2	7.2
Began work by time of follow-up	36	10.5	7.4
Working before disability and still working at time of follow-up	97	28.3	20.0
Not working before disability but working at time of follow-up	54	15.7	11.1
Total working at time of follow-up	151	44.0	31.1

Female spouse employment, however, is not much of a substitute for the employment of the male disabled breadwinner. This is evidenced in Table 30. For a full 38.6 percent of working wives it amounts to less than $2,400 per year, and for 67.1 percent, it is less than $3,600 per year.

It might be expected that employment of children would be another major source of household income. Table 31 suggests that this is not so in most instances. Nevertheless, in 17.7 percent of the households with adult children, children's work is a source of household income, but this represents only 2.9 percent of the households of all applicants.

A tally of contributions to household income is contained in Table 32 and the source of such income is outlined in Table 33.

Table 32 shows 232 spouses as household income contributors. One hundred fifty-one of these are working wives and 54 are working husbands. The remaining 27 wives have incomes in the form of retirement, disability, or welfare benefits, and the like. Work, then, is overwhelmingly the major source of contribution. Among children, however, the major source consists of benefits accruing to the children because of the status of parents as disabled or retired or in the form of aid to dependent children. Other contributors to household income are minimal. This, of course, is simply a reflection of the fact that households typically are not made up of other types of relatives. But where parents do reside in the households of applicants, the source of income of such parents is generally retirement benefits. Turning specifically to the source of household income (Table 33), income from work, and typically wives' work, is the major source of income. The only other major source is disability benefits accruing to family members.

Table 30

Employment Income of Working Wives

Income Level Per Month	Frequency and Percent f	%
Less than $100	11	9.2
$100-$149	20	16.8
$150-$199	15	12.6
$200-$249	23	19.3
$250-$299	11	9.2
$300-$399	19	16.0
$400-$499	9	7.6
$500 or more	9	7.6
Total	119	
Average Income	$256 per month	
Median Income	$229 per month	

Table 31

Household Income from Children's Work

Household Income from Children	f	Proportion: Percent of applicants with children, 18 or over in household N=79	Proportion: Percent of all applicants N=486
Work income from children prior to disability of applicant	3	3.8	0.6
Work income from children initiated at onset of disability	12	15.2	2.5
Work income from children discontinued at onset of disability	1	1.3	0.2
Total with work income from children immediately following disability	14	17.7	2.9
Work income from children discontinued by time of follow-up	10	12.7	2.1
Work income from children began by time of follow-up	10	12.7	2.1
Total with work income from children at time of follow-up	14	17.7	2.9

Table 32

Other Contributors to Household Income

Contributor	Frequency f	Percent %
Spouses	232	47.7
Children	114	23.4
Mothers	11	2.3
Fathers	5	1.0
Siblings	10	2.0
Other relatives	11	2.3
Non-relatives	2	--
All Cases	486	*

*Percentages are not additive since a few cases have multiple sources of household contributors.

Table 33

Sources of Contributions of Household Members

Sources of Income	Frequency f	Percent %
Retirement benefits	22	4.5
Disability benefits accruing to family members	126	25.9
Welfare benefits to family members	18	3.7
Employment income	183	37.6
Other (dividends, interest, property rental, workmen's compensation accruing to family members)	33	6.8
All Cases	486	*

*Percentages are not additive since a few cases have multiple sources of household income.

It can be seen from Table 34 that in all, 30 percent of the households experienced no change (20.2%) or a gain (9.8%) in overall household income. These households (129) are comprised primarily of cases where the disabled applicant is now employed (30) or of cases where the disabled worker was not the major breadwinner (married females, 54). The remaining 70 percent experienced at least some loss with over 24 percent experiencing a loss of $200 per month or more. In households where the major source of applicant income is disability benefits, over 46 percent experienced severe household income loss ($200 or more) while 60 percent of those on retirement benefits did so. This may reflect the more difficult time that older applicant-households have in securing income replacement in lieu of work income. The next section deals more directly with factors associated with income loss, both personal and household.

Factors Associated with Reduction in Personal and Household Income

Table 35 is presented in order to identify those categories of applicants who have suffered the greatest losses. Each of the identifying characteristics will be discussed in their order of appearance in Table 35.

Age. The relation between age and loss of household income is slight with some indication that the likelihood of household income loss increases with age up to age 64 and then the likelihood declines. For example, 60 percent of those less than age 45 reported losses of $50 a month or more compared to 79.4 percent in ages 60-64 and 70 percent in ages 65-69. This suggests that younger households may be somewhat more successful in securing household income replacement than older ones, particularly up to age 65 which is the age for normal retirement when the situation eases somewhat.

Table 34

Major Source of Income by Change in Household Income

Monthly[a] Income	No Income		Disability Benefits		Retirement Benefits		Working		Other		All Cases	
	f	%	f	%	f	%	f	%	f	%	f	%
Gain of $100-$400	--	--	7	2.4	--	--	5	10.2	2	4.9	14	3.3
Gain up to $100	1	3.9	14	4.9	2	7.7	10	20.4	1	2.4	28	6.5
No change in income	8	30.8	53	18.4	4	15.4	15	30.6	7	17.1	87	20.2
Loss of $50-$200	5	19.2	79	27.4	3	11.5	12	24.5	9	22.0	108	25.1
Loss of $100-$300	3	11.5	63	21.9	8	30.8	4	8.2	8	19.5	86	20.0
Loss of $200-$500	2	7.7	44	15.3	4	15.4	2	4.1	8	19.5	60	14.0
Loss of $300-$600	7	26.9	28	9.7	5	19.2	1	2.0	6	14.6	47	10.9
All Cases	26	100.0	288	100.0	26	100.0	49	100.0	41	100.0	430[b]	100.0

[a] It was not possible to construct non-overlapping categories because of the way income data were collected.

[b] 56 cases where income data were insufficient have been excluded.

Table 35

Personal and Household Income Loss by Selected Factors

Selected Factors	Proportion with significant household income loss ($50 per month or more)		Proportion with severe personal income loss ($200 per month or more)	
	%	All Cases	%	All Cases
Age				
Less than 45	60.0	60	56.2	64
45-49	58.2	55	48.3	60
50-54	64.0	75	59.0	78
55-59	76.4	106	55.2	116
60-64	79.4	107	55.5	119
65-69	70.0	27	56.7	30
		430		467
Sex				
Male	70.8	329	58.8	350
Female	68.7	101	44.4	117
		430		467
Race				
White	69.1	376	57.3	408
Negro	75.9	54	40.7	59
		430		467
Panel Evaluation of Physical Limitation				
None/slight	72.6	73	58.7	75
Moderate	71.2	146	61.8	157
Severe	69.6	158	54.8	177
Totally	64.1	53	50.0	58
		430		467
Panel Evaluation of Work Capacity				
Fit for work	69.7	99	55.3	106
Fit for work under special conditions	64.9	57	50.0	60
Not fit	70.8	274	57.1	301
		430		467

Table 35--Continued

Selected Factors	Proportion with significant household income loss ($50 per month or more)		Proportion with severe personal income loss ($200 per month or more)	
	%	All Cases	%	All Cases
Outcome of Application				
Allowed benefits	73.3	243	53.1	273
Denied benefits	65.8	187	58.2	194
		430		467
Subjective Evaluation at Time of Follow-up of Physical Limitation				
Confined to house	78.9	76	68.4	79
Needs help of others to get around	--	8*	--	11*
Gets around by self with difficulty	70.6	204	53.4	223
Not limited in the above ways	64.7	139	52.0	151
		427		464
Subjective Evaluation at Time of Follow-up of Work Limitation				
None/slight	43.3	30	25.8	31
Moderate	64.9	37	46.2	39
Severe	69.8	43	57.8	45
Totally	73.2	313	58.4	346
		423		461
Employment Status				
Employed	41.8	55	23.2	56
Not employed	71.4	375	59.9	411
		430		467
Employment Status of Spouse				
Spouse employed	55.4	130	63.1	149
Spouse not employed	76.3	300	51.6	318
		430		467

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*Frequencies are too small to compute percentages.

No relation between personal income and age is apparent in Table 35. About the same proportions experienced severe losses at all ages. This is so even though the younger might be expected to be more successful in maintaining personal income.

Sex. Virtually the same proportion of males as females experienced significant household income loss, 71 and 69 percent respectively, but some difference in personal income loss is apparent. About 59 percent of the males had severe losses compared to 44 percent of the females. This, no doubt, reflects the higher income levels of males to begin with. With the onset of disability, their monetary loss would likely be greater.

Race. Negroes have a somewhat larger proportion of significant household loss (75.9%) than whites (69.1%), but the situation is reversed with respect to severe personal income loss. Forty-one percent of Negroes lost $200 or more per month while 57 percent of whites did so. Whites had typically higher level jobs before disability so that the difference in personal income loss is understandable. Evidently, however, white households are more likely to offset this loss.

Panel evaluation of physical limitation. It might be expected that the degree of physical limitation as judged by the study panel would be positively related to the extent of income loss. However, there is no indication of this in Table 35. Just as many of the none/slight and moderately limited reported significant household income loss (72.6 and 71.2%), if not more, than the severe and totally disabled (69.6 and 64.1%). Likewise, 58.7 and 61.8 percent of the none/slight and moderately limited reported severe personal income loss compared to 54.8 and 50.0 percent of the severe and totally limited.

Panel evaluation of work capacity. Fitness for work as assessed by the study panel also appears to be unrelated to income loss. Those declared fit for work report the same losses as those declared unfit both in terms of household and personal income.

Outcome of application. Even though evaluations of degree of physical limitation and work capacity were not found to be related to income loss, it might still be expected that the agency determination with respect to disability benefits would be related. (It would be expected that the denied applicants would find work and hence maintain income while those on benefits would have to settle for less.) Not so from the evidence in Table 35. Almost as many of those denied benefits (65.8%) as those granted benefits (73.3%) reported significant household income loss. Serious personal income losses were reported by 53.1 percent of those granted benefits and 65.8 percent of those denied benefits. It appears, then, that if in fact those found fit to work were truly capable of maintaining their own support, little indication of this is found in Table 35.

Subjective evaluation of physical and work limitation. At the time of follow-up, applicants were asked to assess their own degree of limitation. Unlike the objective evaluations of the study team, and the agency determination, the self evaluations do appear to be related to income loss. On the average, the greater the perceived limitation, the greater the income loss. But even among the less severely limited, income loss is high. Even among those who evaluate themselves as having no limitation or only slight limitation, 43.3 percent report significant household income loss, and 25.8 percent report severe personal income loss.

Employment status. As would be expected, the employed experience less income loss, both household and personal, but even among the employed, 23.2 percent report personal income loss of $200 or more.

Employment status of spouse. Applicants with unemployed spouses, 51.6 percent, report more severe personal income loss than applicants with employed spouses, 63.1 percent, and more households without an employed spouse report household income loss (76.3%) than those with an employed spouse (55.4%). There is at least the suggestion here that loss of personal income bears an influence upon spouse employment, which then is likely to make these households better off financially than those without an employed spouse and less personal income loss.

Impacts of Diminished Income

Efforts were made to determine from applicants the extent to which their generally low income affected their capacity to meet such household needs as adequate housing, clothing, and medical attention. A series of relatively open-ended questions was formulated to determine unmet needs of applicants and their households. Several of these questions are listed in Table 36 for the purpose of illustration. Both the applicants and female spouses were questioned along this line.

Tables 37-40 furnish the responses to this line of questioning. Table 37 contains the free responses of both applicants and female spouses to the question regarding utilization of a $500 windfall. Paying bills was the most common response of both applicants (39.7%) and wives (31.1%). A large proportion of applicants (23.0%) and wives (25.5%) mentioned banking in the free response. It is difficult to say just what this means; perhaps nothing more than that they would bank it temporarily before utilizing it.

Table 36

Questions Geared to Determine Unmet Needs of Applicants and Their Households

1. Was there anything you needed or wanted to buy in the last year or two that you were unable to?
    - Anything for the home?
    - Anything for your (wife) husband?
    - Anything for the children?
    - Anything for yourself?
2. If you were to win $500 what would you do with it?
    - Would you use any of it to:
        - ...improve the house?
        - ...take a vacation?
        - ...buy something for the house?
        - ...get some medical attention?
        - ...anything else?

Table 37

Response of Applicants and Female Spouses to Question, "If you Were to Win $500 What Would You Do With It?"

Type of Response	Proportion Responding			
	Applicants		Female Spouses	
	f	%	f	%
Pay bills	193	39.7	73	31.1
Put in bank	112	23.0	60	25.5
Buy clothes for self or family	61	12.5	35	14.9
Buy household goods, appliance	11	2.3	42	17.9
Get medical attention--self or family	33	6.7	16	6.8
Give to church	22	4.5	11	4.7
Buy food, use to live on	16	3.3	15	6.4
Improve housing conditions	--	--	34	14.5
Buy a car	16	3.3	--	--
Other	184	37.8	56	23.8
Total cases	486	--	235	--
Total responses	464		342	

Table 38

Response to Applicant Question, "Would You Use Any of It ($500) for Medical Attention?"

Type of Response	Proportion Responding		Total Cases	
	f	%	f	%
Yes, dental work, glasses	27	5.5		
Yes, help of a physician	106	21.8		
Yes, surgery	8	1.6		
Yes, medicine	7	1.4		
Yes, other, combinations	70	14.3		
Total yes responses			218	44.8
No responses			268	55.2
			486	100.0

Table 39

Response to Applicant and Female Spouse Question, "Was There Anything You Needed or Wanted to Buy in the Last Year or Two That You Were Unable To?"

Type of Response	Proportion Responding			
	Applicants		Spouses	
	f	%	f	%
Clothes for self or family	137	28.2	156	66.3
Appliances, household goods	21	4.3	77	32.8
Home improvements	22	4.5	19	8.1
Medical care for family members	16	3.4	15	6.4
Dental care, glasses	13	2.7	27	11.1
Car	44	9.1	15	6.4
Television	41	8.4	16	6.8
Furnace, plumbing	18	3.7	10	4.2
Other	218	44.8	155	65.9
Total cases	486	--	235	--
Total responses	530	--	490	--

Table 40

Response to Question, "Anything Unable to Buy for Spouse (Children) in the Last Year or Two That You Wanted To?"

Type of Response	Proportion Responding f	%
For Spouse		
Clothes	67	18.9
Household goods	7	2.0
Other	48	13.6
Total married cases responding	354	--
For Children		
Clothes	78	40.6
Toys	11	5.7
Other	57	29.7
Total cases with children responding	192	--

Table 41

Responses to Questions by Applicants and Spouses Regarding Inadequacies of Existing Living Arrangements

Inadequacies	Proportion Responding			
	Applicants		Spouses	
	f	%	f	%
Insufficient space	29	6.0	26	11.1
Not enough bedrooms	20	4.1	21	8.9
Inadequate bathroom facilities	59	12.1	35	14.9
Lack of privacy	20	4.1	14	6.0
	486		235	

Clothes was the next most common item mentioned by 12.5 percent of the applicants and 14.9 percent of their wives. About 18 percent of wives compared to 2.3 percent of applicants mentioned household goods and appliances. No applicants mentioned housing improvements, while 14.5 percent of the spouses did. A good number of items that were not readily classifiable were mentioned by both applicants (37.8%) and spouses (23.8%). These included such things as, "buy necessities, move to country, move to Florida, buy groceries, gifts for children, gifts for friends, go to school, learn a skill, take a trip, too numerous to mention, whatever needed at the time, everything, keep a dollar in my pocket for a change."

Table 38 lists responses to the more direct question whether or not they would use any of the $500 for medical attention. About 45 percent responded in the affirmative with most indicating they would see a physician (21.8%).

Open-ended responses to needs that have not been met are contained in Table 39. Clothing is the most common item mentioned by both applicants (28.2%) and spouses (66.3%). Cars (9.1%) and television sets (8.4%) are the next most common items among applicants, while household goods are the next most mentioned item among spouses (32.8%). Dental care and glasses is another common item among wives (11.1%).

Table 40 covers specific needs of children and spouses. Once again, clothing is the most important item with 40.6 percent of the households with children reporting unmet clothing needs of children.

Questions were also raised regarding adequacy of living arrangements, effect of husband's health condition on living arrangements, and changes in living arrangements that are needed. These data are presented in Tables 41-43.

Table 42

Responses to Question to Spouses on Effect of Husband's Condition on Present Living Arrangements

Spouse's Response	Frequency f	Percent %
No effect	161	68.5
Can't afford anything better	40	17.0
Changed houses to accommodate husband's condition, such as to avoid stairs	13	5.6
Other changes, such as moved in with others	21	8.9
Spouses responding	235	100.0

Table 43

Changes Spouses Would Like to Make in Present Living Arrangements

Type of Change	Frequency f	Percent %
Provide more space	31	13.2
Make general repairs	29	12.3
Move to one floor plan	13	5.5
Improve heating or plumbing	30	12.8
Move to smaller place	6	2.6
Move to better place	7	3.0
Move to better neighborhood	4	1.7
Move to better climate	3	1.3
Spouses responding	235	

Few specific complaints with respect to adequacy of housing are apparent in Table 41, and, as reported in Table 42, 68.5 percent of the spouses indicated that their husband's health condition had no effect on their existing living arrangements. Seventeen percent reported they could not afford better, and 8.9 percent had had to make some adjustment such as moving in with others. Changes in living arrangements that spouses would like to make are contained in Table 43. More space (13.2%), repairs (12.3%), heating and plumbing improvements (12.8%), and moving to a one floor plan (5.5%) were the more common types of changes desired. A total of 14.1 per cent indicated they would move for some reason if it were possible.

Data on effects of applicant-husband's health condition on children are contained in Table 44. About 18 percent of spouses with children reported that they felt their husband's health condition had negatively influenced the amount or type of schooling their children had received. About 11 percent reported that the type of jobs their children acquired was adversely affected by their husband's health. Economic deprivation in general was cited by 21.4 percent of the wives as having a negative effect on the children.

So far we have looked at the impacts of diminished income in terms of unmet needs within the population in general. Table 45 examines some of these unmet needs at specific income levels. A much larger proportion of those with the very lowest income mentioned clothes as a need that was not being fulfilled, 27.6 percent, while only 5.5 percent of those in the $400 or more income bracket did so. No other item in Table 45 appears to be related to income level. It would appear that in general this population has similar economic problems, and the matter of degree is only minor.

Table 44

Effect of Husband's Health Condition on Children

Responses of Spouse	Frequency f	Percent %
Unfavorable effect on schooling--would have acquired more; got a different type of education	28	17.6
Unfavorable effect on type of job children obtained	17	10.7
Economic deprivation	34	21.4
Spouses interviewed with children	159	--

Table 45

Household Needs by Household Income Level

Household Needs	Household Income Per Month Less than $100 %	$100-199 %	$200-299 %	$300-399 %	$400 or more %	All cases %
Anything Needed or Wanted to Buy						
Proportion responding clothes	27.6	10.6	9.9	8.8	5.5	11.3
Proportion responding auto	3.4	9.7	6.9	11.7	5.5	7.7
Proportion responding other (household goods, home improvements, food, etc.)	34.4	37.2	40.6	38.2	36.7	37.7
What Would You Do With $500 (First Response)						
Pay bills	24.6	32.7	37.6	51.5	31.1	35.4
Give to church	3.4	4.4	--	1.5	6.7	3.3
Put in the bank	24.1	19.5	11.9	11.8	25.6	18.4
Buy clothes	10.3	2.7	5.9	8.8	3.3	5.6
Use for medical attention	8.6	3.5	2.0	--	--	2.1
Other (use to live on, household goods, etc.)	27.6	29.2	34.7	4.4	27.8	24.9
No answer	1.7	5.3	4.0	6.0	4.4	4.4
Number of cases	(58)	(113)	(101)	(68)	(90)	(430)

Summary

This chapter reports on the economic situation of former applicants for disability benefits and their families. Even before disability this population had in general a relatively low income. Forty percent of the applicants had incomes of less than $300 per month. By time of follow-up 29.4 percent had incomes of less than $100 per month and a full 84.9 percent had incomes of less than $300 per month. Average monthly income was $166 for those on disability benefits, $134 for those on retirement benefits, $153 for those on some other type of replacement income, and $321 among those working.

Serious loss of income (about $200 per month) since pre-disability days was found among all applicants: 57.7 percent of the disabled, 64.3 percent of the retired, 20.3 percent of the employed, and 62.2 percent of those with some other major income source.

Household income proved to be not a great deal better than applicant income. In 51.3 percent of the cases, there was no income beyond that of the disability applicant. In another 21.3 percent of the cases, the additional household income was less than $100 per month. Prior to disability 27.7 percent of the households of applicants had incomes of less than $300 compared to 68.6 percent at time of application for benefits and 56.0 per cent at time of follow-up.

Of those living alone, 47.6 percent had incomes of less than $100 per month, 36.1 percent of couples had incomes of less than $200 per month, and 49.3 percent of three-member households had less than $300 per month. Moreover, 38.9 percent of the four-member households, and 59.1 percent of the five-member households reportedly were living on less than $300 per month or $3,600 per year.

The panel evaluation of degree of severity of physical limitation had little or no bearing on the likelihood of income loss. The less limited reported the same proportions of severe losses as the severely disabled. Moreover, those granted benefits had virtually the same losses as those declared fit for work and denied benefits.

Impacts of diminished income were examined in terms of unmet household needs. Clothes was the most common item, followed by household goods and housing improvements. Forty-five percent responded yes to the question whether or not they would use a $500 windfall for medical attention. About 18 percent of spouses with children reported that they felt their husband's health condition had negatively influenced the amount or type of schooling their children had received. A much larger proportion of those with the lowest income mentioned clothes as an unmet need (27.6%), while only 5.5 percent of the $400 or more bracket did so. In general, however, level of income did not appear to be related to unmet needs. It would appear that in general this population has similar economic problems, and the matter of degree is relatively minor.

CHAPTER V

EMPLOYMENT OF THE DISABLED

Between the time of initial application for disability benefits and the follow-up study, 93 applicants or 19.1 percent had had some employment experience subsequent to their application, and 61 or 12.5 percent were employed at the time of follow-up. This chapter is devoted to examining the characteristics of those who were able to find employment, describes the nature of employment secured, and then attempts to assess the employability of those not employed.

Characteristics of the Employed Applicants

Tables 46 and 47 contrast the employed with the unemployed on a number of selected characteristics. These tables are virtually the same except that the percentages are in opposite directions. Table 46 has the percentages calculated down the page and is for descriptive purposes. It outlines the general characteristics of the employed in contrast with the total study population. Table 47 has the percentages calculated across the page and is for analytical purposes. It permits an assessment of the importance of a particular characteristic on the likelihood of securing employment. The two tables taken together are more meaningful than either table by itself. For example, while Table 47 indicates that the rate of eventual employment among those allowed benefits is only 3.8 percent, they represent 19.7 percent of the employed. Each characteristic will be discussed separately.

Table 46

Characteristics of the Employed Applicants Compared
to the Total Applicant Population

Selected Characteristics	Employed applicants f	Employed applicants %	Total applicant population f	Total applicant population %
Age				
Less than 45	15	24.6	65	13.4
45-59	36	59.0	260	53.6
60 or more	10	16.4	160	33.0
	61	100.0	485	100.0
Sex				
Male	50	82.0	364	75.1
Female	11	18.0	121	24.9
	61	100.0	485	100.0
Race				
White	54	88.5	425	87.6
Negro	7	11.5	60	12.4
	61	100.0	485	100.0
Education				
8 years or less	30	49.2	292	60.2
9-11 years	16	26.2	111	22.9
12 or more	15	24.6	82	16.9
	61	100.0	485	100.0
Panel Evaluation of Work Capacity				
Fit for work	26	42.6	112	23.0
Fit for special employment	11	18.0	53	11.0
Not fit for work	24	39.4	321	66.0
	61	100.0	486	100.0

Table 46--Continued

Selected Characteristics	Employed applicants f	Employed applicants %	Total applicant population f	Total applicant population %
Initial Determination				
Allowed benefits	12	19.7	280	57.8
Denied benefits	49	80.3	205	42.2
	61	100.0	485	100.0
Final Outcome of Application				
Allowed benefits	12	19.7	319	65.8
Denied benefits	49	80.3	166	34.2
	61	100.0	485	100.0
Self Evaluation of Physical Limitation				
Confined to bed or house or needs help of another to get around	1	1.6	91	18.8
Get around by self with difficulty	14	23.0	232	48.1
Not limited in the above ways	46	75.4	159	33.1
	61	100.0	482	100.0
Self Evaluation of Work Limitation				
None/slight	24	40.0	34	7.1
Moderate	19	31.7	42	8.8
Severe/totally	17	28.3	402	84.1
	60	100.0	478	100.0

Table 47

Characteristics of the Employed Applicants Compared to the Total Applicant Population

Selected Variables	Presently employed		Employed since application but not presently		No employment since application		All cases
	f	%	f	%	f	%	f
Age							
Less than 45	15	23.1	7	10.6	43	66.2	65
45-49	11	17.7	2	3.2	49	79.0	62
50-54	13	16.0	7	8.6	61	75.3	81
55-59	12	10.3	8	6.8	97	82.9	117
60-64	7	5.6	6	4.8	112	89.6	125
65 or more	3	8.6	2	5.7	30	85.7	35
							485
Sex							
Male	50	13.7	26	7.1	288	78.9	364
Female	11	9.1	6	5.0	104	86.0	121
							485
Race							
White	54	12.7	30	7.1	341	80.2	425
Negro	7	11.6	2	3.3	51	85.0	60
							485
Education							
Less than 5 years	7	8.0	8	9.1	73	83.0	88
6-8 years	23	11.3	15	7.4	166	81.8	204
9-11 years	16	14.4	5	4.5	90	81.1	111
High school	14	23.7	2	3.4	43	72.9	59
Some college	1	4.3	2	8.7	20	87.0	23
							485
Panel Evaluation of Work Capacity							
Fit	26	23.2	15	13.4	71	63.4	112
Fit for special employment	11	20.8	4	7.5	38	71.7	53
Not fit for work	24	7.5	13	4.0	283	88.2	321
							486

Table 47--Continued

Selected Variables	Presently employed		Employed since application but not presently		No employment since application		All cases
	f	%	f	%	f	%	f
Initial Determination							
Allowed benefits	12	4.3	6	2.1	262	93.6	280
Denied benefits	49	23.9	22	10.7	130	63.4	205
							485
Final Outcome of Application							
Allowed benefits	12	3.8	8	2.5	291	91.2	319
Denied benefits	49	29.5	23	13.9	94	56.6	166
							485
Self Evaluation of Physical Limitation							
Confined to bed or house or needs help of another to get around	1	1.1	5	5.5	85	93.4	91
Gets around by self with difficulty	14	6.0	17	7.3	201	86.6	232
Not limited in the above ways	46	28.9	9	5.7	104	65.4	159
							482
Self Evaluation of Work Limitation							
None/slight	24	72.7	1	3.0	9	27.3	34
Moderate	19	45.2	3	7.1	20	47.6	42
Severe	9	19.6	6	13.0	31	67.4	46
Totally	8	2.2	21	5.9	327	91.9	356
							478

Age. Table 47 indicates a fairly straight line negative relationship between age and the probability of employment. While 23.1 percent of those under 45 are presently employed, only 5.6 percent of those 60-64 and 8.6 percent of those over 65 are employed. Yet 75 percent of the employed are 45 or more (Table 46).

Sex. The likelihood of males being employed, 13.7 percent, is not much different from that of females, 9.1 percent (Table 47), but since males outnumber females in the labor force and in the study population, 82 percent of the employed are male (Table 46).

Race. The employment rate of whites, 12.7 percent, is no different from that of Negroes, 11.6 percent (Table 47). Whites, of course, make up 88.5 percent of the employed (Table 46).

Education. Education appears to increase the probability of employment, with 8 percent among those with less than 5 years education, compared to 23.7 percent among those with a high school diploma. Among those with some college, however, the rate of employment is only 4.3 percent (Table 47). This deviation from the general pattern is probably due to variations in the severity of the impairment. It would appear that it takes a more serious condition for people with higher levels of education to apply for benefits.

Panel evaluation of work capacity. As would be expected, those found fit for work by the study panel have a higher rate of employment, 23.2 percent, than those found unfit, 7.5 percent. The relationship, however, is a good deal weaker than might be expected. A full 63.4 percent who were declared fit for work had no employment since their application, and 76.8 percent were not employed at the time of follow-up (Table 47).

Agency determination. The percentages involving both the initial determination and the final outcome demonstrate the greater probability of those being denied benefits eventually becoming employed (Table 47). However, 63.4 percent of those initially denied benefits and 56.6 percent of those finally denied benefits experience no employment whatsoever after being denied benefits.

Self evaluation of physical and work limitation. Self evaluations of limitations are more strongly related to the probability of employment than any other variable including the agency determination and the clinical assessments. Only 1.1 percent of those who report being confined to the house are employed compared to 28.9 percent of those experiencing no difficulty getting around (Table 47). Similarly, only 2.2 percent of those who classify themselves as totally limited are employed compared to 72.7 percent of subjects who report none or slight limitation. Placing this in perspective, however, 17 of those employed or 28.3 percent classify themselves as severe or totally limited.

Work orientation. Another factor which might bear an influence upon likelihood of employment is employment motivation. Part of the home interview included a series of agree-disagree type statements from which indexes were constructed. An index to measure the value placed upon work was constructed from the following items: 1. Even if it were financially unnecessary, I would still want to work. 2. If I had a choice, I would work right up to the end. 3. It's no fun taking it easy, when there is work to be done. Those who agreed with all three items (67%) were classified as high work oriented, those who disagreed with all three were classified (12%) as low work oriented, and those with mixed responses (22%)

were classified as moderately oriented. This index leaves much to be desired since all of the items express a favorable disposition to work, and there is probably a tendency to acquiesce to positive statements of this type in an interview situation. Nevertheless, there is a moderate degree of spread in responses, and as can be seen in Table 48, the proportion actually working is no greater among the high work oriented (13.2%) than it is among the low work oriented (12.5%). This suggests that if work motivation bears any influence on employment, it is overshadowed by more influential factors, such as degree of physical limitation and other situational factors. The question of adequacy of this index in assessing work motivation must also be kept in mind.

Table 48

Work Orientation of Applicants by Work Status

Work Orientation	Employment Status			All cases	
	Working		Not working		
	f	%	f	f	%
Low	7	12.5	49	56	(100)
Moderate	11	10.5	94	105	(100)
High	43	13.2	282	325	(100)
	61		425	486	

Self-definition of disability. Earlier we noted that self evaluations of limitation showed a stronger relationship to employment than either panel study assessments or agency determinations. Table 49 combines both the panel evaluation and the self evaluation and relates them to the probability of employment. That group with the highest rate of employment are subjects declared fit by the panel who perceive themselves as only moderately or less disabled (71.4%). These are followed by subjects declared unfit by the panel but who themselves feel only moderately or less disabled (45.9%). On the other hand, those declared fit who see themselves as severely disabled have an extremely low rate (7.1%) followed by those declared unfit and who themselves feel severely disabled (2.2%). These percentages clearly demonstrate the influence of both the objective factors reflected in the panel evaluation and the subjective aspect of the self perception. The relationship of self perception and employment has several possible interpretations. First, the self evaluation is more up to date and may reflect changes in health condition since the initial study.

Table 49

Panel Versus Self Evaluation of Disability
by Work Status at Follow-up

Evaluations of Disability	Employment Status			All Cases	
	Working		Not working		
	f	%	f	f	%
Panel evaluation of fit for work--self evaluation of only moderately or less disabled	20	71.4	8	28	(100)
Panel evaluation of fit for work--self evaluation of severely disabled	6	7.1	78	84	(100)
Panel evaluation of unfit for work--self evaluation of only moderately or less disabled	17	45.9	20	37	(100)
Panel evaluation of unfit for work--self evaluation of severely disabled	6	2.2	270	276	(100)
All others	12	20.0	48	60	(100)
All cases	61	12.6	424	485	(100)

Secondly, the self evaluation might be more realistic and more adequately reflect the difficulties subjects face in attempting to secure employment. That is, individuals might be more attuned to the labor market situation than the clinicians. Thirdly, and perhaps most important, the self evaluation is likely to be a self-fulfilling prophecy. If a person perceives himself as not employable, he is not likely to make much effort to secure employment. However, this study does not consider the evidence that this self perception might be based upon.

Nature of the Work of Employed Applicants

Of particular interest is the nature of the work that former disability applicants are able to secure. This type of information is useful in determining the effect of physical limitation on actual employment as well as in furnishing insights into the type of employment available to physically limited persons. We shall examine such things as employment income, hours of work, job seeking behavior, and specific duties.

Employment income. There is a wide variation in the employment income of applicants with recent work histories (Table 50). While a large proportion would be considered only marginally employed with 26 percent earning less than $200 per month, about 19 percent earn or earned $500 or more a month since their disability. In general, however, employment income is not high. Forty-six to forty-eight percent earned or are earning less than $3,600 per year since their disability. Of course, almost as many (40.2%) did so prior to their application for disability.

Table 50

Employment Income of Applicants with Employment Experience Since Initial Application

Income Level Per Month	Applicants presently working f	Applicants presently working %	Employed since application but not now working f	Employed since application but not now working %	All cases with employment after application f	All cases with employment after application %
Less than $50	4	8.7	--	--	4	5.8
$50-$99	4	8.7	1	4.4	5	7.3
$100-$149	2	4.3	3	13.0	5	7.3
$150-$199	2	4.3	1	4.4	3	4.3
$200-$249	6	13.1	2	8.7	8	11.6
$250-$299	3	6.5	5	21.7	8	11.6
$300-$399	9	19.6	4	17.4	13	18.8
$400-$499	7	15.2	3	13.0	10	14.5
$500 or more	9	19.6	4	17.4	13	18.8
Total cases with income data	46	100.0	23	100.0	69	100.0
No data on income	15		9		24	
Total cases	61		32		93	

Hours of employment. Seventy-two percent of those employed or who had been employed were working a full forty hour or more week. Seventeen percent were working over 20 hours and 11 percent less than 20. Most of those working only part time are on disability or retirement benefits, and their income is not sufficient to disqualify them from benefits (Table 51).

Limitation on the job. Among those who had secured employment after onset of disability (93 cases or 19.1% of all applicants), 65.6 per cent were not working at their usual occupation, 33.3 percent were working fewer hours, and 57.0 percent said they were earning less than they could have if it were not for their health condition. Sixty-four percent felt they were unable to change jobs and 49.5 percent reported difficulty in securing raises or promotions (Table 52).

Table 51

Number of Hours Per Week Employed Among Those With An Employment Experience Since Their Application For Disability Benefits

Hours Per Week	Frequency f	Percent %
Less than 20	10	10.8
20-39	16	17.2
40 or more	67	72.0
Total Cases	93	100.0

Table 52

Limitations in Employment Among Those With Employment Experience Since Their Application For Disability Benefits

Type of Limitation	Job limitations because of health condition f	%
Working fewer hours	31	33.3
Earning less than could otherwise	53	57.0
Forced to work at a job applicant dislikes	11	11.8
Unable to work at usual occupation	61	65.6
Unable to change jobs	60	64.5
Difficulty securing raises or promotions	46	49.5
All cases	93	--

Means of securing job. Of the 93 applicants with a post disability employment experience, 76 or 81 percent acquired a new job with a new employer, 14.9 percent returned to their old job and 4.3 percent to their old employer but on a different job. Friends were the most common source of help in finding a job (14.9% of the cases), relatives were next (5.3%). The state employment service was involved in three cases, and the Bureau of Vocational Rehabilitation in two cases.

Nature of employment. Jobs of employed applicants were classified according to the U. S. Census Bureau Index of Occupations, and these are tallied in Table 53. This type of classification, however, tends to be too general in certain of the categories and somewhat misleading. We have chosen, therefore, a number of cases for more detailed description.

Three of the "managers, proprietors" operate gasoline service stations. One had been a service station attendant before his disability, one was a former truck driver, and the other a factory foreman. Their present incomes are between $200-$300 per month.

The applicant reporting the highest income, over $600 per month, owns a warehouse and works as the office manager. He formerly operated a bowling establishment before disability at $400 per month. Another applicant, a former meat cutter, owns and operates a trailer rental company. He would not divulge his income.

There is quite a bit of variation in applicants classified as bookkeepers. Their respective incomes are $10 per week (part time), $25, and $45 per week. One machinist earns $120 per week running a plastic mold machine. He is a former brick layer at $140 per week. The other operates a metal drilling machine and earns $109 per week.

Table 53

Occupations of Applicants Presently Employed

Occupation	f	%
Managerial, clerical, sales (purchasing agent 1; managers, officials, proprietors 6; bookkeepers 3; mail carrier 1; secretaries 1; ticket, station and express agent 1; clerical and kindred 1; salesmen and salesclerks 2)	16	25.8
Craftsmen, foremen, and kindred workers (Carpenters 1; electricians 1; inspectors 1; machinists 2; mechanics, auto 2; mechanics, repairmen, nec 4; pressmen and printers 1; craftsmen, nec 2)	14	22.6
Operatives and kindred workers (Parking attendant 1; bus driver 1; deliverymen 1; furnace man 1; painters 3; sewers 1; cab drivers 1; truck drivers 2; welders 2; other operatives 3)	18	29.0
Service workers (Baby sitters 3; bartenders 2; housekeepers 1; janitors 1; guards 1; sanitation workers 1)	9	14.5
Laborers (Farm laborers 1; lumbermen 1)	2	3.2
No data	3	4.9
All cases	62	100.0

Both returned to their old jobs. The electrician earns $2.14 per hour. This is a new job but at his former occupation. All of these applicants had had their applications for benefits denied because their conditions were not considered severe enough.

Of particular interest are cases (none mentioned above) of applicants for disability benefits who were actually found disabled and began receiving disability benefits but were found to be working at time of the follow-up. Since these applicants were considered to be unemployable, their subsequent employment history should furnish insights into possible avenues of rehabilitation for others. For this reason, a brief history of each of the 12 follows:

Case 1 involves a 53 year old male high school graduate. He was injured while employed as a laborer at $73 per week. He was first denied benefits and then allowed benefits due to post traumatic arthritis, right femur. He has an erratic history of employment with Goodwill Industries since the time of his disability and was employed by them at the time of follow-up as a phone operator at $1.00 per hour. He works about 17 hours per week and continues to be on disability benefits. His total income is about $200 per month.

Case 2 is a widowed female, 53 years old. She did light factory work at $55 per week for several years before being disabled by a heart condition. She was placed on disability benefits due to arteriosclerotic heart disease with congestive failure. She continues on benefits and earns $10 per week babysitting. She has had four subsequent hospitalizations for her heart condition. She lives alone and reports a total income of $100 per month.

Case 3 is also a female, single, aged 41. Her former employment was a seamstress earning $50 per week. She was placed on disability benefits as a result of chronic muscular disease of undetermined etiology. She continues to receive benefits but does some sewing at home which is brought to her by a dry cleaner. Her total income is $150 per month. She lives alone.

Case 4 is 51 years old, male, and has only three years of schooling. He worked for years as a truck driver earning $90 per week. He was granted disability benefits as a result of arteriosclerotic heart disease with posterior myocardial infarct. Applicant states that the Bureau of Vocational Rehabilitation taught him to repair appliances and got him a job with Goodwill Industries earning $176 per month. He continues to receive benefits for the present. He has a total income of $300 per month. He lives with his wife and minor child.

Case 5 is a 65 year old male. His former work history is incomplete. His last job before disability application was as a farm hand earning $60 per week. He suffers from non-union and pseudoarthrosis of left tibia and chronic osteomyelitis of left tibia. He was receiving disability benefits but by virtue of age now receives retirement benefits. He now works in a filling station 20 hours per week at $1.00 per hour, remaining within the limitations placed on retired persons. His total income is about $250 per month. He just remarried a woman with four teenage children.

Case 6 is that of a 58 year old married male. He operated his own grocery store before his heart attack in 1960, realizing about $125 per week. He then worked as a salesman selling agricultural equipment ($200 per week) until a second heart attack in 1962 when he was granted disability benefits. At the time of the follow-up he was still receiving disability benefits, but had just begun selling fruits and vegetables at $125 per month, apparently on a temporary basis. His total monthly income is about $150 per month. He lives with his unemployed wife.

Case 7 was a former expediter in a factory earning $100 per week. He is 38 and lives with his wife. He was granted disability benefits because of severe generalized pulmonary emphysema. After three years of disability, he claims his lung capacity improved miraculously from 25 per cent to 75 percent, and he has just begun a trial period of employment as a bank teller at $78 per week. He does not like the work, however.

Case 8 is a recent widower, 46 years old. He worked as a laborer for ten years at $60 per week. Due to an injury he was granted disability benefits in 1962 due to a compound comminuted fracture of right tibia and fibula with delayed union. He began working again in 1966 as a sanitation worker (refuse collector) for $96 per week. Benefits have been discontinued. He lives with his fifteen year old daughter.

Case 9 has three years of formal education. He is 45 and worked ten years as a coal miner ($100 per week) which he had to give up because of "asthma" in 1956. Since then he worked at what odd jobs he could find. The last job he held before applying for benefits (1963) was as a laborer for a construction company earning $54 per week. At this time he was granted disability benefits with a diagnosis of pulmonary emphysema and bronchial asthma. At the time of follow-up (1967) the applicant had just begun a job as a stock clerk "stacking boxes" for a frozen food company. His salary is $56 per week, and he is no longer receiving benefits.

Case 10 is 26 years old. He has eight years of schooling. He worked all his life as a farm hand until 1964 when he quit on "doctors orders." He was earning $45 per week. This applicant was granted disability benefits at that time with a diagnosis of progressive muscular dystrophy. He claims he then went to school for six months to learn engine repair, and the school found him a job in a service station (May, 1966) where he now earns $80 per week. He is no longer receiving disability benefits. He says he is not happy and wants to be back on the farm. He lives with his wife and two minor children. There is no other income.

Case 11 was a factory worker for eleven years prior to his disability. He is 50 years old with 8 years of schooling. He was earning $88 per week when he was granted benefits in 1962 due to herniation of nucleus pulposus and thrombophlebitis of right lower extremity resulting from a work accident. He received benefits until 1966 when he acquired a job as a prison guard. He earns $90 per week and lives with his wife who does not work.

Case 12 is 56 years old with eight years of school. He suffered a stroke while employed as a maintenance man earning $75 per week. He was granted disability benefits as a result in 1961. He says his condition improved greatly, and he returned to his old job soon after. He attributes his recovery to will power and an exercise contraption he constructed himself. He lives with his wife who does not work. Applicant is no longer on benefits and earns $400 per month.

In summary, of these 12 cases of legally disabled workers returning to work, the first five are not substantially gainfully employed, and their work income is minimal. Two are employed in sheltered workshops and two work at home. The other was moved from disability benefits to retirement benefits by virtue of age and works part time in a service station. It is difficult to say whether the physical conditions of disabled workers on benefits who have no supplemental income are any different from these disabled workers with some minimal employment. Our guess is that they are not greatly different, but rather circumstances are, which furnish rather unique opportunities: possessing a skill that can be utilized at home such as sewing; an opportunity to baby sit; acceptance in a sheltered workshop. It is probably safe to assume that if there were more opportunities in sheltered workshops, a larger proportion of this type of applicant would be at least minimally employed.

The next two cases described are substantially employed, but at least temporarily still on disability benefits. One is selling fruits and vegetables which is probably only temporary and may not disqualify him for benefits. The other, a bank teller, is more permanently situated, but he indicates he does not like the job. His self perception is such, however, that he is likely to maintain employment somewhere and be removed from the disability roles.

The last five applicants are clear-cut cases of return to substantial gainful employment after a legal determination of disability. All have had their disability benefits discontinued. One, a stroke victim returned to his former job. One recovered from a complicated fracture and returned to a better job after a five-year layoff. Another, an emphysematous coal miner, took a job as a stock clerk after four years of disability. A young man with muscular dystrophy returned to work in a service station after receiving disability benefits for about a year. And finally, an applicant involved in a work injury recovered sufficiently after five years to take another job. No meaningful generalization seems possible from these cases. Cases involving recovery from injury including a stroke are perhaps easiest to understand. Cases involving chronic degenerative conditions are somewhat more difficult.

These cases point out that the likelihood of disabled workers on benefits returning to work under present circumstances is virtually nil.

Only 12 or 3.8 percent of the applicants granted benefits as the result of their disability application were working at the time of follow-up. Moreover, only 5 or 2.4 percent were employed sufficiently to remove them from the disability roles. But the work experience of disability applicants who are denied benefits and hence assessed capable of working is better only by comparison. Forty-nine or 29.5 percent were found to be working, with about 5 of these or 3 percent only minimally (less than $100 per month). In other words, about 73 percent of those denied benefits were not working or not working sufficiently to disqualify them from benefits if they had met other requirements of sufficient physical limitation.

Employability of Disability Applicants

Specific information was garnered from the disability applicants who were not employed regarding conditions under which they felt they could work.

Looking for work. To begin with, only 11.8 percent of those unemployed looked for work after their application for benefits (Table 54). Somewhat more of those denied disability benefits (25.5%) did some job hunting compared to those who were granted benefits (7.4%). Virtually all who did not look for work claimed it was simply no use because of their health condition. This raises the question whether or not some may have given up too soon, particularly the three of every four applicants who were denied benefits. Tables 55 and 56 are presented to shed some light on this question.

Table 55 looks at the proportions of those looking for work among both the allowances and the denials at levels of prospect for placement.

Table 54

Applicants Who Looked for Work by Outcome of Application

Outcome of Application	Proportion who looked for work since their application f	%	All cases
Allowed benefits	22	7.4	295
Denied benefits	24	25.5	94
All cases	46	11.8	389

Table 55

Proportion of Applicants Not Employed Who Looked for Work by Panel Evaluation of Prospects for Placement and Final Outcome of Application

Panel Evaluation of Prospects for Placement	Proportion Looking for Work Allowed benefits %	All cases	Denied benefits %	All cases
Not placeable	6.8	234	12.2	49
Placement difficult or very difficult, requiring extensive or moderate solicitation	12.5	16	23.1	13
Placement not difficult, can return to former job or jobs readily available	8.9	45	43.1	30

Table 56

Work Orientation of Applicants by Proportion Who Looked for Work

Work Orientation	Proportion of applicants who looked for work f	%	All cases f	%
Low work orientation	5	11.6	43	(100)
Moderate work orientation	10	11.2	89	(100)
High work orientation	31	12.1	257	(100)
All cases	46	11.8	389	(100)

Part of the initial study panel evaluation included an assessment of applicant's prospects for finding employment. From the data there appears to be a lack of concordance between the legal determination regarding benefits and the panel assessment of job prospects. Forty-five, or 15 percent of those allowed benefits and not employed were deemed by the study as not difficult to place. In contrast, 49 or 53.3 percent of those denied and unemployed were deemed to be not placeable by the study panel. Much of the discrepancy, of course, between the panel assessment and the legal determination is the different criteria utilized in the evaluations. The legal determination of disability is based on the extent to which a physical limitation makes the applicant unemployable. The panel evaluation reflects not only unemployability from any source in addition to the physical impairment, but also placeability or marketability of the applicant. In other words, an applicant may very well not qualify for disability benefits, but he still may not be placeable due to 1) a combination of limitations in addition to his physical impairment (which may be quite minor); and

2) the labor market situation. It is not enough for a person to be capable of performing a job; he must compete favorably with others who have fewer limitations than he, who are competing for the very same job.

The failure, then, of many applicants to look for employment is understandable. A good many are simply not placeable. And the degree of placeability is at least moderately related to the likelihood of looking for employment, at least among those not receiving benefits (Table 55). Twelve percent of those deemed not placeable looked for employment compared to 43.1 percent of those where jobs were thought by the panel to be readily available. Yet among those denied benefits but not working despite the higher rate of job seeking, there still remains a small segment, 17 applicants or 18 percent, who were deemed readily placeable by the panel but did not look for a job.

Among those on benefits, few looked for jobs regardless of their degree of placeability, suggesting that being on benefits bears a negative relation to job seeking behavior. The self perception of disability is reinforced by the legal decision allowing benefits.

Table 56 examines the proportion of unemployed applicants who looked for work at levels of applicants' work orientation or work motivation. Their measure was introduced and explained in Chapter V, page 91. The purpose of this comparison was to see whether job seeking behavior could be explained by subjective differences with respect to work as opposed to health and situational factors regarding employability. If this work orientation has any validity in assessing attitude toward work, then attitude toward work accounts for none of the variability in job seeking behavior. Rather, it would appear that self perception and need (as demonstrated by the differences between the allowals and denials, irrespective of actual placeability) and a realistic appraisal of labor market opportunities (as demonstrated by the denials at levels of placeability) account for most of the variability in job seeking behavior.

Condition under which applicants felt they could work. Applicants who were not working were asked regarding conditions under which they felt they could work. A total of 156 applicants or 40 percent of those not employed felt there was some condition under which they could work. Thirty-seven percent of those receiving benefits felt they could work under some condition compared to 51 percent of those denied benefits. Table 57 lists the proportions of those allowed and those denied benefits who responded affirmatively to given conditions under which they might be able to work. The condition most popularly endorsed was, If the work could be set up to suit applicant's physical condition: 30.8 percent by allowals and 44.2 percent by the denials. This item was followed by Being able to rest on the job, 25.4 percent by the allowals and 44.2 percent by the denials. Twenty-one percent of the alloweds and 28 percent of the denied felt they could work if they were able to sit down. If they could work less than 20 hours was endorsed as a condition under which they could work by 17.7 percent of those on benefits and by 33.7 percent of those denied benefits. Similarly, 15.4 percent of the beneficiaries felt they could work if they had a way to get to work while 34.7 percent of those not on benefits felt this way.

Table 58 lists the same hypothetical work conditions but cross tabulated with work orientation of applicants. No differences appear to exist between the low and high work oriented with respect to applicants' self perceptions of employability.

Table 57

Proportion of Applicants Who Felt They Could Work
Given Specific Conditions by Outcome of Application

Conditions Under Which Applicant Feels He Could Work	Proportion Responding They Could Work					
	Applicants allowed benefits		Applicants denied benefits		All cases	
	f	%	f	%	f	%
If able to work less than 20 hours per week	53	17.7	32	33.7	85	21.6
If able to sit down while working	64	21.4	27	28.4	91	23.1
If able to rest on the job	76	25.4	42	44.2	118	29.9
If had a way to get to work	46	15.4	33	34.7	79	20.1
If could be absent more than usual	60	20.1	32	33.7	92	23.4
If work could be set up to suit his physical condition	92	30.8	42	44.2	134	34.0
All cases	299	--	95	--	394	--

Table 58

Conditions Under Which Applicants Feel They Could Work by Work Orientation

Work Condition and Work Orientation	Proportion who feel they could work f	%	All cases
If able to work less than 20 hours per week			
Low-moderate work oriented	32	24.1	133
High work oriented	53	20.3	261
If able to sit down while working			
Low-moderate work oriented	27	20.3	133
High work oriented	64	24.5	261
If able to rest on the job			
Low-moderate work oriented	38	38.6	133
High work oriented	80	30.7	261
If had a way to get to work			
Low-moderate work oriented	27	20.3	133
High work oriented	52	19.9	261
If could be absent more than usual			
Low-moderate work oriented	32	24.1	133
High work oriented	60	23.0	261
If work could be set up to suit physical condition			
Low-moderate work oriented	42	31.6	133
High work oriented	92	35.2	261

About the same proportion of each see themselves as employable under given conditions. These perceptions then do not appear to be related to employment motivation.

From the above, it would appear to us that an important distinction must not be lost sight of--the distinction between employability and placeability. The general feeling among applicants is that regardless of whether or not they are employable, they are simply not placeable given the condition and nature of the labor market situation. For most it would appear there is a good justification in fact for this feeling.

Summary

This chapter deals with the employment experience and employability and placeability of the disability applicants.

Those with a greater likelihood of succeeding in returning to work were the young, the more educated (with some exception), those found fit for work by the study panel, and those denied benefits. The variables with the strongest association with the likelihood of employment was the applicants' self evaluation of physical and work limitations. These had a stronger association than either the study panel or the state agency evaluations. Sex, race and applicant's work orientation did not appear to be related to likelihood of employment. If work orientation bears any influence, it is overshadowed by the effect of more influential factors, such as degree of physical limitation and other situational factors.

The over-riding importance of self evaluations of limitation may be attributed to several factors: 1) The self evaluation is more up to date than the initial study evaluations and may reflect changes in health condition, 2) The self evaluation may be more realistic and more adequately reflect difficulties subjects face in attempting to secure employment, and 3) The self evaluation may operate as a self-fulfilling prophecy. If a person believes himself to be disabled, he is not very likely to secure employment.

Employment income of those who did secure employment was quite variable. While a large proportion would be considered only marginally employed with 26 percent earning less than $200 per month, about 19 per cent were earning $500 or more.

Seventy-two percent were working a full forty hour week; 11 per cent were working less than 20 hours. Sixty-six percent were not working at their usual occupation, and 57 percent said they were earning less than they could if it were not for their health. Eighty-one percent acquired a new job, 15 percent returned to their old job, and 4 percent to their old employer at a new job.

The state employment service helped in 3 cases and the Bureau of Vocational Rehabilitation in 2 cases of job finding. Friends were the most important source of help in finding a job, 14.9 percent of the time.

Occupations of applicants working are detailed in Table 53.

Only 12 or 3.8 percent of the applicants granted benefits as the result of their application were working at the time of follow-up. Moreover, only 5 or 2.4 percent were employed sufficiently to remove them from disability roles. Forty-nine or 29 percent of denied cases were found to be working with about three percent only minimally. A full 73 percent were not working or not working sufficiently to disqualify them from benefits if they had met other requirements of sufficient physical limitation.

Only 11.8 percent of those with no employment actually looked for work after their application for benefits. Twenty-five percent of the denials did so compared to seven percent of those granted benefits. Virtually all who did not look for work claimed that it was "no use," and for most, there seems to be a good justification in fact for this attitude. Over half of the denials who were unemployed had been judged not placeable by the study team. Work motivation did not appear to be related to the likelihood of looking for employment.

Forty percent of those not employed felt there was some condition under which they could work.

The analysis suggested that an important distinction has been overlooked--the distinction between employability and placeability. The general feeling among applicants backed up by some hard evidence is that regardless of whether or not they are employable, they are simply not placeable given the condition and nature of the labor market situation.

CHAPTER VI

FAMILIES OF DISABLED APPLICANTS

The impact of disability often falls as heavily upon the family of a disabled worker as it does on the disabled worker himself. We have already seen in Chapter IV the economic impact it causes. Other hardships and necessary adjustments stem from the disruption of normal family roles brought on by the disability. This chapter is concerned with changes in family composition and structure and modification of routines to accommodate the disability of a family member. The first section deals with family composition, the second with changes in roles and family routine, and the third with help received from kin, particularly as they relate to the disability of the applicant population.

Family Composition

The family composition of these applicants for disability benefits was examined and analyzed at the time of the original study. Nineteen family types were constructed utilizing marital status, presence and age of children, and presence or absence of other relatives as important dimensions. Seventy-three percent of the males and 55 percent of the females were married. Two and one-tenth percent of the females had the sole responsibility of breadwinner for dependent children. The majority were living with husbands or, if living alone, had no minor dependents.

Only 9.8 percent of those married lived with relatives other than spouse or children. A greater proportion of widows lived alone (71%) compared to single women (55%). Disabled married females were more likely to be found in extended family settings (17.3%) than disabled married males (7.7%), but twice as many widowed males (42.2%) as widowed females (21.9%) lived with relatives. The once-married were more likely to live alone after their marriages were terminated than the never-married. The least likely to live alone were single females (39.6%) while the most likely were widowed females (78.1%).[10]

It was further found that generally the older the disabled person, the greater the likelihood of living alone. Fewer blacks were found in marital settings (49.9%) than whites (69.1%). However, no difference was noted in the proportion of blacks or whites living with relatives as opposed to living alone.[10]

It was not possible to compare the distribution of family types found among disabled applicants with the distribution in a non-disabled population. However, comparisons of family types were made at varying levels of severity of physical limitation. In general, the proportions of family types were about the same at differing levels of physical severity.[10]

Data from the follow-up study on family composition were analyzed in several ways differing from the manner in which they were studied originally. However, before proceeding to this analysis, a few comparisons of findings with the former study are in order. Roughly 73 percent were married at the time of application for benefits. Six percent were divorced, widowed or separated during the interim, while two percent married.

Seventy percent were married at the time of follow-up. While 73 percent of the original male applicants were married, 78 percent of those in the follow-up study were married. This increase in the married proportion is likely brought about by three factors: 1) remarriage of widowed or divorced males, 2) higher death rate of older widowed males who are consequently not in the follow-up population, and 3) possibly greater attrition among non-married applicants because of inability to locate. On the other hand, the proportion of married females declined considerably from 55 to 45 percent. This is no doubt due almost entirely to the higher death rate of males at all age levels.

At the time of the initial study 9.8 percent of the married couples were living with other relatives, that is in an extended relationship. At the time of follow-up 7.3 percent were doing so. Living in an extended relationship, then, is neither a short nor a long term adjustment to disability for most disability applicants.

Table 59 gives a general distribution of the applicant population in terms of family living arrangements. In spite of the physical limitations of many of these applicants, only one percent is actually institutionalized. About 14 percent live alone while 64 percent live in a typical nuclear family setting. In Tables 60-62 the same frequencies in living arrangements as contained in Table 59 are presented, but they are cross-tabulated with age, sex, race, and source of income.

As would be expected, age is related to the likelihood of being found in a non-family type living arrangement. About 21 percent of those 55 or more live alone, board, or are institutionalized compared to 9.0 percent of those less than 45 (Table 60).

Table 59

Family Living Arrangements of Disability Applicants

Living Arrangement	Frequency and Distribution f	%
Institutionalized	5	1.0
Boards	12	2.5
Lives alone	67	13.8
Family of procreation only (husband and/or wife and/or children)	310	63.8
Family of orientation only (applicant living with parent or parents)	12	2.5
Family of gerontation (applicant is grandparent in household)	28	5.7
Family of procreation and orientation (three generations where applicant is middle generation)	14	2.9
Applicant living with siblings or sibling's family	17	3.5
Family of more distant relatives (cousins, aunts, etc. and non-relative companions)	21	4.3
All applicants	486	100.0

Table 60

Family Living Arrangements by Age

Living Arrangements	Age			
	Less than 45	45-54	55-64	65-69
Lives alone, boards, institutionalized	9.2	11.9	22.2	20.0
Family of procreation only (husband and/or wife and/or children)	69.2	69.2	60.5	54.3
Family of orientation only (applicant living with parent or parents)	4.6	5.6	0.4	--
Family of gerontation (applicant is grandparent in household)	--	6.3	4.9	20.0
Family of procreation and orientation (three generations where applicant is middle generation)	7.7	2.8	2.1	--
Applicant (no spouse) living with sibling or sibling's family	3.1	2.1	4.1	5.7
Applicant (no spouse) living with more distant relatives or non-relatives	6.1	2.1	5.7	--
All cases	100(65)	100(143)	100(243)	100(35)

Table 61

Family Living Arrangements by Sex and by Race

Living Arrangements	Sex and Race Male %	 Female %	 White %	 Black %
Lives alone, boards, institutionalized	13.4	28.9	16.9	26.7
Family of procreation only (husband and/or wife and/or children)	71.0	42.1	65.7	48.3
Family of orientation only (applicant living with parent or parents)	2.5	2.5	2.8	--
Family of gerontation (applicant is grandparent in household)	5.5	6.6	4.9	11.7
Family of procreation and orientation (three generations where applicant is middle generation)	2.2	5.0	3.1	1.7
Applicant (no spouse) living with sibling or sibling's family	2.5	6.6	2.8	8.3
Applicant (no spouse) living with more distant relatives or non-relatives	3.3	8.3	4.4	3.4
All cases	100(365)	100(121)	100(426)	100(60)

Table 62

Family Living Arrangements by Major Source of Income of Applicants

Living Arrangements	Source of Income				
	No income %	S.S. disability benefits %	S.S. retirement benefits %	Work %	Other %
Lives alone, boards, institutionalized	7.1	19.4	15.2	14.9	8.9
Family of procreation only (husband and/or wife and/or children)	57.1	62.7	54.5	81.5	64.4
Family of orientation only (applicant living with parent or parents)	--	2.5	--	--	8.9
Family of gerontation (applicant is grandparent in household)	--	5.9	21.2	1.9	2.2
Family of procreation and orientation (three generations where applicant is middle generation)	14.3	2.5	--	--	
Applicant (no spouse) living with siblings or sibling's family	--	3.4	6.1	1.9	6.7
Applicant (no spouse) living with more distant relatives or non-relatives	21.5	3.7	3.0	--	4.4
All cases	100(28)	100(324)	100(33)	100(54)	100(45)

Nuclear families are more frequent in the younger age categories and, of course, the elderly are more likely to be in households where their status is grandparent (20%).

Females are more likely to live alone and less likely to be in nuclear settings (Table 61). This is related to characteristics of women in the labor force in general. That is, disproportionate numbers of non-married females are in the labor force to begin with, and since this population is from the labor force, the same is true in this study population.

Nineteen percent of those on disability benefits live alone and 63 percent are in nuclear settings (Table 62). Retirement status is, of course, age-related. Hence, 21 percent of the retired are in households as grandparent while 15 percent live alone. Those who are working and who tend to be younger are found primarily in nuclear settings (81.5%).

Table 63 represents an attempt to highlight and summarize certain family characteristics in relation to socio-demographic variables.

Living alone is more common than average (13.7%) among females (24.8%), among those reporting good health (21.8%), and among the late middle-aged (18.9%).

Living with a spouse is most common among males (77.7%) as opposed to females (45.4%), those under 45 (75.1%) in contrast to the elderly (62.9%), the few with no income (78.6%) who are predominantly females living with a male breadwinner, those employed (77.3%), and among whites (71.6%) in comparison to blacks (56.7%).

Minor children are present in 28.5 percent of the applicant households ranging from 58.2 percent in households where the applicant is less than 45 to a low of 11.5 percent in households where the applicant is over 65.

Table 63

Family Living Arrangements by Selected Variables

Selected Variables	Proportion living alone %	Proportion living with spouse %	Proportion with minor children %	Proportion in non-family households* %	All cases N
Sex					
Male	10.1	77.7	32.0	5.5	365
Female	24.8	45.4	19.0	14.9	121
Race					
White	13.4	71.6	28.4	7.2	426
Black	16.7	56.7	30.1	11.7	60
Age					
Less than 45	4.6	75.1	58.2	9.2	65
45-54	9.8	74.2	39.9	4.2	143
55-64	18.9	66.5	16.7	9.3	243
65 or more	11.4	62.9	11.5	5.7	35
Major Source of Income					
No income	7.1	78.6	28.7	21.5	28
S.S. disability benefits	15.7	69.7	28.3	7.1	324
S.S. retirement benefits	9.1	60.6	12.1	9.1	33
Working	13.0	77.3	37.7	1.9	54
Other	8.9	63.9	32.0	11.1	45
Self Evaluation of Health					
Poor	14.9	71.0	31.6	9.6	228
Not so good	18.1	69.1	21.6	6.0	166
Good	21.8	75.6	22.9	5.7	87
Degree of Employment Handicap					
Slight/moderate	14.5	65.7	26.3	8.0	76
Severe	14.9	74.4	42.5	4.3	47
Total	13.2	71.0	27.2	8.0	363
All cases	13.7	69.4	28.5	7.6	486

*Living with others excluding parents, spouse, or children.

Only 7.6 percent live in households which are non-family in nature: households without parents, spouse, or children of the applicant. One-fifth of the few reporting no income live in such households, and more females (14.9%) than males (5.5%) do so also.

Subjects were asked if their households had changed since their application for benefits. A full 88 percent reported no change while 9 percent either moved into the household of another or had someone move in with them. About six percent reported additions to their household, such as family members returning home or relatives moving in. Twenty-three percent experienced losses to their households, such as death (4.1%), marriage (8.4%), and induction in the service (1.8%).

Sixty-two percent were living in the same location, while ten percent had moved three or more times.

Family Roles and Relations

Wives of male subjects were interviewed especially to garner information concerning the impact of the husband's disability on family roles and relations. The analysis which follows is limited to the 235 cases involving male applicants and their wives.

Family routines. Table 64 furnishes information concerning the performance of predominantly female activities. It gives the proportion of households where wife, husband, children, and others, respectively, are engaged in the preparation of meals, the setting of the table, and grocery shopping. Wives, as expected, predominate in each of the activities, although husbands and children play an important secondary role. Children are most often involved in table setting as a matter of routine (12.3%), and grocery shopping is a joint husband/wife activity (20.9% of the time).

Table 64

Performance of Primarily Female Tasks by Family Members and Change Since Onset of Husband's Health Condition

Family Member	Tasks Prepares meals %	 Sets table %	 Grocery shops %
Performed as a matter of routine			
Wife	86.1	75.1	66.0
Husband	6.8	4.7	9.0
Children	3.0	12.3	--
Husband/wife together	--	2.1	20.9
Other	1.7	5.5	3.9
	100(235)	100(235)	100(235)
Helps out occasionally			
No one	34.9	35.9	45.5
Wife	8.5	10.6	7.2
Husband	30.2	28.1	35.7
Children	18.3	19.6	8.5
Husband/children	3.0	1.7	0.9
Others	5.6	4.4	2.1
	100(235)	100(235)	100(235)
Change in routine since onset of husband's condition			
Changed--due to husband's condition	16.2	12.9	16.2
Changed--not due to husband's condition	11.5	10.2	7.7
Not changed	72.3	76.9	76.1
	100(235)	100(235)	100(235)

3

Husbands are involved in grocery shopping 9.0 percent as a matter of routine, 20.9 percent jointly with spouse, and 35.7 percent helping out occasionally. Table setting is the least common for husbands, only 4.7 percent doing so as a matter of routine, and 28.1 percent helping out occasionally. Respondents (wives) were asked if these routines had been modified as a result of their husbands' physical condition. About 16 percent of the routines had been changed with regard to meal preparation, about 13 percent with respect to table setting, and about 16 percent had been modified in the area of grocery shopping. About one in four households experienced changes in routine, but not all of it was attributed directly to the husband's health.

Table 65 examines data with respect to the same activities as Table 64 but at different levels of physical limitation of husbands. This comparison is made in order to determine the extent to which routines differ in households where the husband is more severely disabled. It will be noted that no drastic difference in the performance of routines is found in households where the husband's limitation is severe or total. Wives still tend to perform these predominantly female tasks. However, there is some increase in the likelihood of husbands performing these tasks when their condition is more severe. For example, while 97.3 percent of the wives of less severely limited husbands prepare meals as a matter of routine, only 84.3 percent of those with more severely limited husbands do so. Performance of grocery shopping also appears to be associated with the severity of the husband's condition. More severely limited husbands tend to have greater involvement. Eighty-one percent of the wives of less disabled husbands shop unilaterally compared to 63.1 percent of the wives of the more disabled.

Table 65

Performance of Primarily Female Tasks by Family Members at Levels of Husband's Limitation for General Employment

Tasks and Family Member Performance	Degree of Limitation of Husband		
	None, slight or moderate %	Severe or totally %	All cases
Preparation of meals			
Wife	97.3	84.3	
Husband	--	8.1	
Children	2.7	3.0	
Husband/wife together	--	2.5	
Other	--	2.1	
All cases	100 (37)	100 (198)	(235)
Setting table			
Wife	78.4	74.7	
Husband	2.7	5.1	
Children	8.1	13.1	
Husband/wife together	--	2.5	
Other	10.8	4.6	
All cases	100 (37)	100 (198)	(235)
Grocery shopping			
Wife	81.1	63.1	
Husband	5.4	10.1	
Children	--	--	
Husband/wife together	13.5	22.2	
Other	--	4.6	
All cases	100 (37)	100 (198)	

About 19 percent of the less disabled husbands are involved in shopping compared to 32.3 percent of the more disabled. This is in spite of the fact that they would have a more difficult time getting around.

Table 66 details the performance of primarily masculine tasks by family members. There is much less predominance of any one family member in these tasks in contrast to what was found in the primarily female roles. Wives are most likely to keep up the garden (30.2%) followed by husbands (27.2%) and then children (13.2%). Wives most often carry out trash (44.3%) followed by husbands (23.0%) and children (18.7%). Car washing is purchased in 22.6 percent of the households and 17.0 percent do not own a car. Husbands most frequently wash cars (21.7%) followed by children (18.3%) and then wives (11.5%). Carrying out the trash is the most common activity of children. About 40 percent either do so routinely or help out occasionally. The routine of keeping up the yard changed in 31.9 percent of the households as the result of the husband's physical limitation. The husband's condition was responsible for modifying responsibility for trash in 8.5 percent of the households and car washing in 29.8 percent.

Table 67 looks at the performance of the primarily male tasks at levels of severity of the husband's condition. With respect to keeping up the yard, little difference in the assignment of this role is noted between households with a more or less severely disabled husband/father. Considerable difference is noted with respect to carrying out trash, however. Fewer wives of the more disabled carry out trash routinely (40.4%) than wives of the less disabled (64.9%). Where wives do not do so, the disabled husbands and children are more likely to accomplish this task.

Table 66

Performance of Primarily Male Tasks by Family Members and Change Since Onset of Husband's Health Condition

Family Member	Tasks		
	Keeps up yard/garden %	Carries out trash %	Washes car %
Performed as a matter of routine			
Wife	30.2	44.3	11.5
Husband	27.2	23.0	21.7
Children	13.2	18.7	18.3
Husband/wife together	8.1	7.7	3.4
Others	7.3	6.4	5.5
Hired help	6.4	--	22.6
No one, no (yard) (car)	7.7	--	17.0
	100 (235)	100 (235)	100 (235)
Helps out occasionally			
No one	40.5	36.6	54.9
Wife	14.5	17.0	6.8
Husband	13.6	23.0	6.0
Children	14.5	20.9	9.8
Husband/children	0.9	--	0.4
Others	9.1	2.5	5.1
Not done	7.7	--	17.0
	100 (235)	100 (235)	100 (235)
Change in routine since onset of husband's condition			
Changed due to husband's condition	31.9	8.5	29.8
Changed not due to husband's condition	3.4	4.3	2.6
Not changed	57.4	86.9	53.6
No such activity	7.3	--	14.0
	100 (235)	100 (235)	100 (235)

Table 67

Performance of Primarily Male Tasks by Family Members at Levels of Husband's Limitation for General Employment

Task and Family Member Performance	Degree of Limitation of Husband		
	None, slight or moderate %	Severe or totally %	All cases
Keeps up yard/garden			
Wife	21.6	32.3	
Husband	27.0	27.3	
Children	13.5	13.1	
Husband/wife together	8.1	8.1	
Others	5.4	7.5	
Hired help	5.4	6.5	
No one, no yard	18.9	5.6	
All cases	100 (37)	100 (198)	(235)
Carries out trash			
Wife	64.9	40.4	
Husband	16.2	24.2	
Children	10.8	20.2	
Husband/wife together	2.7	8.6	
Others	5.4	6.6	
All cases	100 (37)	100 (198)	(235)
Washes car			
Wife	13.5	11.1	
Husband	35.1	19.2	
Children	13.5	19.2	
Husband/wife together	2.7	3.5	
Others	--	4.5	
Hired help	18.9	23.2	
No one, no car	16.2	19.2	
All cases	100 (37)	100 (198)	(235)

Getting the car washed also appears to be related to the degree of severity of the husband's condition. Among the households with a more severely disabled husband, fewer husbands and fewer wives wash the car, while more children do so, or washing of the car is purchased.

Decision making. The role of decision maker as it is related to the husband's health condition is examined in Tables 68 and 69. Decisions regarding the purchase of a car, the purchase of furniture, when to call a doctor, and the issue of changing residences are analysed. In each of these areas the most common arrangement is for decisions to be made jointly. This is true 72 percent of the time relative to auto purchases, 76 percent of the time regarding purchase of furniture, in 54 percent of the households on the issue of when to call a doctor and in 80 percent relative to changing residence (Table 68). In Table 69, each of these areas of decision making is compared on the basis of the degree of severity of the disabled husband. First with respect to purchase of a car there is not only a slight decrease in the husband's independent decision making with increased severity, but there is also some decrease of the wife's independent decisions.

Table 68

Major Decision Making by Family Members

Family Members	Major Decision			
	Purchase of car %	Purchase of furniture %	When to call doctor %	Change of residence %
Husband	23.0	6.0	5.5	11.5
Wife	3.0	18.3	33.2	6.9
Both together	71.9	75.7	54.0	79.6
Other, no data	2.1	--	7.3	2.0
All cases	100 (235)	100 (235)	100 (235)	100 (235)

Table 69

Major Decision Making of Family Members at Levels of Husband's Limitation for General Employment

Major Decision and Family Member Making It	Degree of Limitation of Husband		
	None, slight or moderate %	Severe or totally %	All cases
Purchase of car			
Husband	29.7	21.7	
Wife	8.1	2.0	
Both together	62.2	73.7	
Other, no data	--	2.6	
All cases	100 (37)	100 (198)	235
Purchase of furniture			
Husband	2.7	6.6	
Wife	29.7	16.2	
Both together	67.6	77.3	
Other, no data	--	--	
All cases	100 (37)	100 (198)	235
When to call a doctor			
Husband	5.4	5.6	
Wife	43.2	31.3	
Both together	45.9	55.6	
Other, no data	5.4	7.6	
All cases	100 (37)	100 (198)	235
Change of residence			
Husband	10.8	11.6	
Wife	16.2	4.5	
Both together	70.3	81.3	
Other, no data	2.7	2.5	
All cases	100 (37)	100 (198)	235

That is, the likelihood of joint decision making with respect to the purchase of a car increases with the severity of the husband. Somewhat the same pattern is true with respect to purchasing furniture except that the husband's overall involvement increases from 70.3 percent among those with less severe conditions to 83.9 percent among those with more severe conditions. This is similar to the pattern that prevails on the issues of calling a doctor and changing residence. In each instance there is a slight decrease of wives' independent decisions with increased severity of husbands' conditions and in overall increase in the husbands' involvement. For example, less severely limited husbands involve themselves in the decision concerning the doctor in 51 percent of the households while 61 percent are involved among the more severely disabled. Likewise, 81 percent of the less disabled help to decide on changing residence compared to 93 percent of the more disabled.

Interpersonal relations. Questions were also formulated to determine from the spouse the effect her husband's condition had upon the family's interpersonal relations and social functioning. From Table 70, it will be noted that 60.0 percent of the couples spent more time together, 56.6 percent felt closer, 59.1 percent spent more time at home, 51.1 percent spent less time with relatives, and 54.5 percent spent less time with friends as a result of the husband's health condition. Forty-five percent of the wives felt their husband's condition had brought him closer to the children.

Table 71 outlines the types of restrictions and adjustments wives felt necessary as a result of their husbands' conditions. Eleven percent mentioned not being able to get out together, 5.5 percent not being able to do things together, and 6.0 percent of the wives mentioned being tied to the house.

Table 70

Interpersonal Relations Among Family Members as Related to Husband's Health Condition

Interpersonal Relations	Effect of Husband's Condition			
	Increase %	Decrease %	No effect %	N
Time husband and wife spend together	60.0	13.2	26.8	235
Feeling of closeness between husband and wife	56.6	8.5	34.9	235
Feeling of closeness between husband/father and children	45.2	9.1	45.7	197
Number of evenings spent at home	59.1	3.4	37.4	235
Time spent with relatives	4.3	51.1	44.7	235
Time spent with friends	2.6	54.5	43.0	235

While 24.7 percent mentioned financial problems as the most difficult adjustment, 14.0 percent mentioned strains in the marital relationship, 12.8 percent not getting out, and 9.8 percent having to get a job. About 12 per cent of the wives felt low income was the most difficult adjustment for children, while the same percentage mentioned strained relationships. Eleven percent mentioned fear or worry and 7.6 percent mentioned the inability of the husband/father to do things with the family.

Help Received from Kin

It might be expected that families facing the disability of a breadwinner would rely considerably on relations outside the immediate family to help meet such a crisis. This section is concerned with the extent to which this is true.

Table 71

Effect of Husband's Health Condition on Spouse and Children

Type of Effect	Frequency and Percent f	%
Restricts wife's activities		
Husband dislikes crowds	3	1.3
Can't do things together	13	5.5
Can't get out together	26	11.1
Wife tied to home	14	6.0
Wife must work	4	1.7
Wife must do more at home	1	0.4
Other	13	5.5
No restriction on activities	161	68.5
All cases	235	100.0
Most difficult adjustment for wife		
Financial problems	58	24.7
Getting a job	23	9.8
Personal care of husband	5	2.1
Emotional strains on marital relationship	33	14.0
Seeing husband in pain	10	4.3
Not getting out	30	12.8
Fear, worry	14	6.0
Change in cooking	1	0.4
Other	33	14.0
None mentioned	28	11.9
All cases	235	100.0
Most difficult adjustment for children		
Low income	23	11.7
Husband unable to do things with the family	15	7.6
Emotional strains in relationship	23	11.7
Children having to work	2	1.0
Not getting out	6	3.0
Fear, worry	22	11.2
Having to do more around the house	1	0.5
Other	26	13.2
None mentioned and/or no children	79	40.1
All cases	197	100.0

Association with kin. It was noted earlier that 51 percent of the wives of applicants reported a decrease in time spent with relatives. This is no doubt the result of the loss of easy mobility associated with disability; and this together with the decrease in evenings spent out and decreased association with friends suggest a general shrinking of the life space of disabled people and their families. Table 72 has listed in it the proportion of applicants who see particular relatives as often as once a week and once a month. Excluded from this tally are relatives who actually live with the applicant and his family. The extent to which people see a particular relative is, of course, to a great extent a function of the availability of such a relative. The final column of Table 72 lists the proportion of cases where a relative is deceased or non-existent. As would be expected in a predominantly older population, 72.4 percent of the mothers of applicants are deceased as are 84.7 percent of fathers and roughly 62-64 percent of fathers and mothers-in-law. This helps to explain why only 2.6 percent of applicants see their mothers as often as once per week and only 11.3 percent as often as monthly. Other relatives who are younger and have a higher rate of availability are seen more often. For example, 21.9 per cent of applicants see an eldest daughter as often as weekly, 21.4 percent see an eldest son that often. (This, of course, excludes sons and daughters living at home.) Younger children are not likely to be seen as often, primarily as a result of decrease in availability. In other words, fewer applicants have a second and third son or daughter than have a first son or daughter. In sum, then, relatives most likely to be seen on a weekly basis are: eldest daughter (21.9% of the time), eldest son (21.4%), second eldest daughter (14.1%), eldest sister (13.0%), eldest brother (11.4%), and second eldest son (11.0%).

Table 72

Proportion of Applicants Who See Particular Relatives as Often as Once a Week or Once a Month and Proportion With No Such Relative

Relative of Applicant	Proportion of Applicants		
	See relative as often as once per week %	See relative as often as once per month %	Relative deceased or non-existent %
Mother	2.6	11.3	72.4
Father	1.6	5.4	84.7
Mother-in-law	6.8	13.5	62.1
Father-in-law	5.6	9.4	64.6
Eldest son	21.4	30.0	34.4
Second eldest son	11.0	17.0	63.7
Third eldest son	5.4	7.0	82.0
Eldest daughter	21.9	28.4	39.2
Second eldest daughter	14.1	17.5	65.7
Third eldest daughter	4.4	6.6	80.8
Eldest brother	11.4	24.2	28.9
Second eldest brother	6.0	12.2	54.0
Third eldest brother	4.0	10.5	72.3
Eldest sister	13.0	25.8	30.0
Second eldest sister	8.9	19.5	47.4
Third eldest sister	3.2	10.3	68.8
Other relative, not mentioned above*	26.8	48.7	--
Other relative, not mentioned above	11.2	19.2	--

*Grandchildren, nieces, nephews, cousins, aunts, uncles.

Other relatives, such as grandchildren, nieces, nephews and the like are seen as often as once a week in 26.8 percent of the cases, but no one of them in particular is seen as often as sons, daughters, brothers, and sisters. Relatives likely to be seen on at least a monthly basis follow much the same order: eldest son, eldest daughter, eldest sister, eldest brother, and second eldest sister.

While Table 72 listed the proportion of applicants seen as often as weekly or monthly regardless of whether that relative was alive or ever existed, Table 73 furnishes the proportion of relatives seen that often based only on the applicants who possess that relative.

Table 73

Proportion of Applicants Who See Particular Relatives
Among Those Who Possess Such Relatives

	Proportion of Applicants			
Relative of Applicant	See relative as often as once per week	See relative as often as once per month	Number and proportion of applicants with such relative	
	%	%	N	% of all applicants
Mother	9.4	40.9	135	27.6
Father	10.5	35.3	75	15.3
Mother-in-law	17.9	35.6	184	37.9
Father-in-law	15.8	26.6	173	35.4
Eldest son	31.8	45.5	319	65.6
Second eldest son	30.6	47.2	177	36.3
Third eldest son	23.5	38.9	88	18.0
Eldest daughter	36.1	46.4	296	60.8
Second eldest daughter	35.9	39.0	215	44.3
Third eldest daughter	22.9	34.4	94	19.2
Eldest brother	15.8	34.0	346	71.1
Second eldest brother	13.0	27.1	224	46.0
Third eldest brother	14.4	37.9	135	27.7
Eldest sister	18.6	36.2	341	70.0
Second eldest sister	17.0	36.1	256	52.6
Third eldest sister	10.3	33.0	152	31.2

In other words, among those applicants who have a mother living (27.6%), 9.4 percent see her as often as weekly and 40.9 percent see her as often as monthly. But even with availability taken into account as it is in Table 73, adult children and siblings are likely to be seen more often than parents.

And solely with respect to parents, parents-in-law are somewhat more likely to be seen on a weekly basis than parents. Mothers-in-law are seen weekly when available in 17.9 percent of the cases, while available mothers are seen that often only 9.4 percent of the time.

The higher rate of contact among elder sons and daughters as compared to younger ones is not all attributable to availability. As can be seen in Table 73 where availability is taken into account, elder sons and daughters are still likely to be seen more often than younger ones.

Eldest daughters, when available, are seen most often on a weekly basis (36.1% of the time) followed by eldest son (31.8%), second eldest daughter (35.9%), second eldest son (30.6%), third eldest son (23.5%), third eldest daughter (22.9%), and then eldest sister (18.6%). Of all relatives, mothers are least likely to be seen as often as weekly (9.4% of the time). This is at least partly explained by the fact that the sample is predominantly male and reflects the fact that wives' mothers are more readily accepted than husbands' mothers in the home.

In general, it would appear that relatives are not seen as often as would be expected. No relative is seen as often as monthly in over one-half of the cases. Six out of ten mothers and 6½ out of ten fathers are not seen as often as monthly.

Household tasks. Efforts were made to determine the extent to which relatives aided in the performance of household tasks. This information is presented in Table 74. Help in household tasks is presented at levels of the applicant's physical limitation. Few households rely on the help of relatives in the area of cooking and housework. Roughly 2 in 10 do so.

Table 74

Help Received from Relatives in Household Tasks by Degree of Applicant's Physical Limitation

Household Tasks and Relatives Involved	Degree of Physical Limitation			
	None, slight or moderate %	Severe %	Totally %	All cases %
Cooking or housework				
No outside help received	85.5	85.1	80.2	81.0
Daughters and daughters-in-law	2.6	8.5	11.2	9.4
Sisters and sisters-in-law	6.6	2.1	2.5	3.0
Mothers and mothers-in-law	--	2.1	0.8	0.8
Cousins and nieces	1.3	--	0.8	0.8
Other relatives	3.9	2.1	4.5	4.3
All cases	100.0(76)	100.0(47)	100.0(356)	100.0(479)*
Shopping				
No outside help received	93.4	78.7	75.3	78.3
Daughters and daughters-in-law	1.3	4.3	9.8	7.8
Sons and sons-in-law	1.3	4.3	4.5	3.9
Sisters and sisters-in-law	2.6	6.4	3.1	3.2
Mothers and mothers-in-law	--	2.1	0.6	0.6
Cousins, nieces and nephews	1.3	--	2.2	1.8
Others	--	4.3	4.2	3.4
All cases	100.0(76)	100.0(47)	100.0(356)	100.0(479)*
Looking after minor children		(Combined)		
No help received	71.9		64.6	66.7
Daughters and daughters-in-law	--		7.6	5.4
Sisters and sisters-in-law	6.3		12.7	10.8
Mothers and mothers-in-law	15.6		10.1	11.7
Other relatives	6.3		5.1	5.4
All cases	100.0(32)		100.0(79)	100.1(111)

*Excludes seven cases with insufficient data.

Degree of severity of applicant's condition appears to make very little difference. About 85 percent of the households with a less severely limited member receive no outside help compared to 80 percent in households with a more severely limited member. A little more outside help is evident in the area of shopping and such help does appear to be related to the severity of the applicant's condition. Only seven percent of the households with a less severely limited member rely on relatives in the area of shopping compared to 25 percent where the member's condition is very severe. Looking after children is the most common source of help from relatives. This varies from about 28 percent of the time in the milder cases of applicant disability to 35 percent in the more severe cases.

Financial help. Respondents were also questioned concerning financial help received from relatives outside the home. These data are presented in Table 75. Help in terms of lending money and furnishing food and clothing are examined at levels of the physical limitation of the disabled member. The lending of money is a fairly common source of help from relatives. Twenty-nine percent report such help, but this type of help is clearly not related to the degree of physical limitation of the husband. The furnishing of food and clothing is less common with 11 percent reporting such help and no apparent increase of this type of help with the severity of the husband's condition.

Summary

This chapter was concerned with changes in family composition and structure and modification of roles and routines to accommodate the disability of a family member.

Table 75

Help Received from Relatives in Financial and Other Matters by Degree of Applicant's Physical Limitation

Help from Relatives	Degree of Physical Limitation: None, slight or moderate %	Severe %	Totally %	All cases %
Lends money in an emergency				
No help received	69.7	74.5	71.9	71.3
Daughters and daughters-in-law	--	--	2.2	1.6
Sons and sons-in-law	3.9	2.1	5.1	4.5
Sisters and sisters-in-law	3.9	10.6	6.2	6.1
Brothers and brothers-in-law	13.2	4.3	10.1	10.2
Mothers and mothers-in-law	5.3	6.4	1.4	2.4
Fathers and fathers-in-law	3.9	2.1	0.8	1.4
Other relatives	--	--	2.2	1.6
All cases	100.0(76)	100.0(47)	100.0(356)	100.0(479)
Furnishes food or clothing				
No help received	92.1	93.6	88.0	89.0
Daughters and daughters-in-law	--	2.1	1.4	1.2
Sons and sons-in-law	1.3	2.1	2.0	1.8
Sisters and sisters-in-law	1.3	--	3.1	2.6
Mothers and mothers-in-law	1.3	--	0.8	0.8
Brothers and brothers-in-law	4.0	2.1	1.7	2.0
Other relatives	--	--	2.8	1.4
All cases	100.0(76)	100.0(47)	100.0(356)	100.0(479)

At the time of the initial study 9.8 percent of the married couples were living with other relatives, that is in an extended relationship. At the time of follow-up 7.3 percent were doing so.

Only one percent of this disabled population were living in an institution. About 14 percent were living alone while 64 percent were found living in a typical nuclear family setting. More of the older applicants lived alone and more females than males were doing so. The young and the employed were most likely to be found in nuclear settings (81.5%).

Minor children are present in 28.5 percent of the households. Only 7.6 percent live in households not composed of relatives.

A full 88 percent reported no change in the composition of their households since the initial study. Sixty-two percent were living in the same location while 10 percent had moved three or more times.

With respect to the change in family routines as a result of the husband-breadwinner's disability, 16 percent reported change in meal preparation, 13 percent with respect to setting the table, and 16 percent in the area of grocery shopping. Some greater likelihood of husbands performing female tasks when their conditions were more severe was noted. Little relation was found between the severity of husband's condition and keeping up the yard, but considerable difference was noted in carrying out trash and getting the car washed. Fewer wives of more severely disabled husbands carry out trash routinely. Where wives do not do so, children and husbands appear to take up the slack. Among households with a more severely disabled husband, fewer husbands and fewer wives wash the car while more children do so or the car is taken to be washed.

In the area of decision making, such as the purchase of a car or furniture, the issue of when to call a doctor, and the change of residence, in general there is an increase in the likelihood of husband involvement with increased physical limitation. In general, the employment of the wife tends to increase involvement of the husband in household tasks, and personal dependency tends to decrease his role in decision making.

Sixty percent of the married couples reported they spent more time together, 59 percent spent more time at home, 51 percent reported spending less time with relatives, and 54 percent less time with friends. Forty-five percent of wives felt their husband's condition had brought them closer together.

In connection with association with non-household relatives, only 2.6 percent of the applicants saw their mothers as often as once per week and only 1.6 saw their fathers that often. Twenty-one percent saw an eldest son weekly; 22 percent saw an eldest daughter that often. Younger relatives were more likely to be seen often because more of them were still living and available for visitation. But even when availability is taken into account, only 9.4 percent of applicants with living mothers see her as often as once per week and 40.9 percent see her as often as monthly.

Help received from non-household relatives was also examined. Few households rely on relatives for help with household tasks regardless of the physical condition of the disabled member. Looking after children was the most common source of outside help reported, varying from about 28 per cent in households with a mildly disabled member to 35 percent in the more severe cases. Financial help of relatives in terms of lending money in an emergency was reported in 29 percent of the households but the likelihood of receiving such help did not appear to be related to the severity of the disabled member's condition.

CHAPTER VII

GENERAL ACTIVITIES OF APPLICANTS

An important point of interest in planning the follow-up was to determine what people do with their time. Particularly when they are faced with a disability that denies them employment and other normal social relations.

Outside activities. In Chapter VI it has already been noted that disability applicants spend less time than formerly with friends and relatives and more time at home and with their spouses. Additional information of this nature is contained in Table 76. It will be noted that 53.4 percent of this population are not church members, 47.1 percent never attend church, 75.2 percent belong to no organization, and 89.0 percent spend no time in organizational activities. Forty-nine percent spend no evenings of the week out of the house, and 94.3 percent never attend movies. On the other hand, 21.6 percent attend church at least weekly and 17.5 per cent are out of the house three or more evenings per week.

Table 76 also presents these data at two levels of severity of the physical limitation of the applicant. This is done to give some indication of the influence of the disability on this type of behavior. It will be noted that the more severely disabled appear more likely to retain church membership (55.0%) than the less disabled (44.7%) but frequent church attendance is a little more common among the less severely disabled, with 38.1 percent attending at least several times a month compared to 27.5 percent attending that often among the more severely disabled.

Table 76

Time Spent in Outside Activities by Degree of Physical Limitation of Applicant

Type of Activity	Degree of Physical Limitation: None, slight or moderate f	%	Severe or total f	%	All cases f	%
Church Membership						
Membership	34	44.7	221	55.0	255	53.4
No membership	42	55.3	181	45.0	223	46.6
	76		402		478	
Church Attendance						
Never	34	44.7	190	47.5	224	47.1
Once per month or less	13	17.1	100	25.0	113	23.7
Several times per month	8	10.5	28	7.0	36	7.6
Weekly or more	21	27.6	82	20.5	103	21.6
	76		400		476	
Organization Membership						
None	48	63.2	312	77.6	360	75.2
One organization	23	30.2	60	14.9	83	17.7
Two or more	5	6.6	30	7.5	35	7.1
	76		402		478	
Hours Spent per Week in Organization Activities						
None	58	77.3	364	91.2	422	89.0
Less than 2 hours	10	13.3	19	4.8	29	6.1
Two or more	7	9.3	16	4.0	23	4.9
	75		399		474	
Evenings per Week Spent Out of House						
None	31	41.3	195	50.5	226	49.1
One	13	17.3	81	21.0	94	20.4
Two	10	13.3	50	13.0	60	13.0
Three or more	21	28.0	60	15.5	81	17.5
	75		386		461	
Attendance at Movies						
Never	67	88.2	383	95.7	450	94.3
Less than monthly	8	10.5	13	3.2	21	4.2
More than monthly	1	1.3	5	1.1	6	1.5
	76		401		477	

Sixty-three percent of the less severely disabled have no organization membership compared to 77.6 percent of the more severely disabled. No organizational activity was reported by 77.3 percent of the less disabled in contrast with 91.2 percent of the more disabled. Likewise, the more disabled tended to spend fewer evenings out, while neither group attended movies to any extent.

Household activities. Table 77 examines time spent in several household chores by degree of physical limitation of applicants. These data are presented for males and females separately since such activities are highly sex-related.

With respect to hours spent cooking each day, it is interesting to note that time spent increases with degree of limitation among males but decreases with degree of limitation among females, although cooking is, of course, typically a female activity and is such in this population. Nevertheless, 17.2 percent of the males with a severe disability spend an hour or more cooking and 29 percent spend at least some time cooking, and among the less severely disabled, 25 percent are involved in some cooking. On the other hand, 9.5 percent of the less disabled females do no cooking compared to 14.6 percent of the more severely disabled.

In the area of "housework," female involvement tends to decrease with degree of severity. Nine and one-half percent do no housework among the less severely disabled females compared to 19.8 percent of the more seriously disabled. No relation appears to exist between severity of condition and doing housework among the males. Sixty as opposed to 66 percent do no housework, while about 20 percent in each category perform housework for an hour or more.

Table 77

Time Spent in Household Chores by Degree of Physical Limitation and Sex of Applicant

Type of Activity	Degree of Physical Limitation					
	None, slight or moderate		Severe or total		All cases	
	f	%	f	%	f	%
Hours Per Day Cooking						
Male:						
None	41	74.5	215	71.2	256	71.7
Less than 1 hour	9	16.4	35	11.6	44	12.3
One hour or more	5	9.1	52	17.2	57	16.0
	55		302		357	
Female:						
None	2	9.5	14	14.6	16	13.7
Less than 1 hour	2	9.5	14	14.6	16	13.7
One hour or more	17	81.0	68	70.8	85	72.6
	21		96		117	
Hours Per Day on Housework						
Male:						
None	33	60.0	200	66.0	233	65.1
Less than 1 hour	11	20.0	41	13.5	52	14.5
One to two hours	11	20.0	47	15.5	58	16.2
Over two hours	0	--	15	5.0	15	4.2
	55		303		358	
Female:						
None	2	9.5	19	19.8	21	17.9
Less than 1 hour	4	19.0	13	13.5	17	14.5
One to two hours	6	28.6	29	30.2	35	29.9
Over two hours	9	42.9	35	36.5	44	37.6
	21		96		117	
Hours Spent Working Around Outdoors in Summer--Per Day						
Male:						
None	17	30.9	174	58.0	191	53.8
Less than 1 hour	11	20.0	34	11.3	45	12.7
One to two hours	13	23.6	51	17.0	64	18.0
More than two hours	14	25.5	41	13.7	55	15.5
	55		300		355	
Female:						
None	15	71.4	77	78.6	92	77.3
Less than 1 hour	2	9.5	7	7.1	9	7.6
One to two hours	3	14.3	8	8.2	11	9.2
More than two hours	1	4.8	6	6.1	7	5.9
	21		98		119	

The likelihood of working around outdoors in the summer decreases with severity of condition, at least among males. Thirty-one percent of those with less serious conditions do no such work compared to 58 percent of applicants with more serious conditions. Little difference is noted in female behavior with 71.4 and 78.6 percent reporting no such activity.

Recreation activities. Table 78 presents data by sex and degree of physical limitation on such activities as reading newspapers, magazines, and books, watching television, listening to the radio, and time spent on hobbies. In general it can be seen that 20.2 percent of the males and 14.5 percent of the females read no newspaper, 55.2 percent and 52.1 percent, respectively, read no magazines, and 73.5 percent of the men and 61.5 percent of the women read no books. Eleven percent of the men and six percent of the women watch no television and 31.0 and 38.8 percent, respectively, do not listen to a radio. Most males (71.4%) and most females (64.1%) do not have a hobby. Thirty-nine percent of the men and 20 percent of the women spend more than four hours a day just sitting and relaxing.

With respect to males who are more seriously disabled, they appear less likely to read newspapers or magazines than their less disabled counterparts. The more disabled males are somewhat more likely to read books and watch television. Somewhat more of the more seriously disabled do not listen to the radio, but a larger proportion of them listen for three hours or more per day than do the less seriously disabled. Hobbies are no more common among the more seriously disabled than exist for the less seriously disabled. A good deal more of the more seriously disabled spend a considerable time (43.1%, more than four hours), just sitting than their better off counterparts (14.5%, more than four hours).

Table 78

Time Spent in Recreational Activities by Degree of Physical Limitation and Sex of Applicant

Type of Activity	Degree of Physical Limitation				All cases	
	None, slight or moderate		Severe or total			
	f	%	f	%	f	%
Hours per Day Reading Newspaper						
Male:						
None	7	12.7	65	21.5	72	20.2
Less than half hour	6	10.9	35	11.6	41	11.5
Less than hour	17	30.9	68	22.5	85	23.8
One to two hours	21	38.2	107	35.4	128	35.9
More than two hours	4	7.3	27	8.9	31	8.7
	55		302		357	
Female:						
None	3	14.3	14	14.6	17	14.5
Less than half hour	0	--	14	14.6	14	12.0
Less than hour	5	23.8	30	31.3	35	29.9
One to two hours	12	57.1	31	32.3	43	36.8
More than two hours	1	4.8	7	7.3	8	6.8
	21		96		117	
Hours per Day Reading Magazine						
Male:						
None	23	41.8	175	57.6	198	55.2
Less than hour	17	30.9	54	17.8	71	19.8
One to two hours	14	25.5	43	14.1	57	15.9
More than two hours	1	1.8	32	10.5	33	9.2
	55		304		359	
Female:						
None	8	38.1	54	55.1	62	52.1
Less than hour	5	23.8	17	17.3	22	18.5
One to two hours	5	23.8	17	17.3	22	18.5
More than two hours	3	14.3	10	10.2	13	10.9
	21		98		119	

Table 78--Continued

Type of Activity	Degree of Physical Limitation					
	None, slight or moderate		Severe or total		All cases	
	f	%	f	%	f	%
Hours per Day Reading Books						
Male:						
None	42	76.4	221	72.9	263	73.5
Less than hour	5	9.1	24	7.9	29	8.1
One to two hours	6	10.9	37	12.2	43	12.0
More than two hours	2	3.6	21	6.9	23	6.4
	55		303		358	
Female:						
None	10	47.6	62	64.6	72	61.5
Less than hour	3	14.3	11	11.5	14	12.0
One to two hours	7	33.3	12	12.5	19	19.2
More than two hours	1	4.8	11	11.5	12	10.3
	21		96		117	
Hours per Day Watching TV						
Male:						
None	9	16.4	31	10.3	40	11.3
Less than hour	4	7.3	12	4.0	16	4.5
One to two hours	10	18.2	64	21.3	74	20.8
Two to three hours	16	29.1	74	24.7	90	25.4
More than three hours	16	29.1	119	39.7	135	38.0
	55		300		355	
Female:						
None	0	--	7	7.1	7	5.9
Less than hour	1	5.0	4	4.1	5	4.3
One to two hours	4	20.0	19	19.4	23	19.7
Two to three hours	3	15.0	30	30.6	33	28.2
More than three hours	12	60.0	38	38.8	50	42.7
	20		98		118	
Hours per Day Listening to Radio						
Male:						
None	18	33.3	119	39.8	137	38.8
Less than hour	10	18.5	28	9.4	38	10.8
One to two hours	10	18.5	53	17.7	63	17.8
Two to three hours	7	13.0	36	12.0	43	12.2
More than three hours	9	16.7	63	21.1	72	20.4
	54		299		353	

Table 78--Continued

Type of Activity	Degree of Physical Limitation None, slight or moderate f	%	Severe or total f	%	All cases f	%
Female:						
None	4	20.0	32	33.3	36	31.0
Less than hour	4	20.0	7	7.3	11	9.5
One to two hours	6	30.0	22	22.9	28	24.0
Two to three hours	1	5.0	10	10.4	11	9.5
More than three hours	5	25.0	25	26.0	30	25.9
	20		96		116	
Hours per Day Spent on Hobby						
Male:						
None	36	69.2	206	71.8	242	71.4
Less than hour	6	11.5	19	6.6	25	7.4
One to two hours	4	7.7	23	8.0	27	8.0
Two to three hours	4	7.7	23	8.0	27	8.0
More than three hours	2	3.8	16	5.6	18	5.3
	52		287		339	
Female:						
None	13	61.9	62	64.6	75	64.1
Less than hour	2	9.5	5	5.2	7	6.0
One to two hours	3	14.3	14	14.6	17	14.5
Two to three hours	2	9.5	7	7.3	9	7.7
More than three hours	1	4.8	8	8.3	9	7.7
	21		96		117	
Hours per Day Just Sitting						
Male:						
None	22	40.0	60	20.1	82	23.2
Less than hour	5	9.1	4	1.3	9	2.5
One to three hours	14	25.5	63	21.1	77	21.8
Three to four hours	6	10.9	43	14.4	49	13.8
More than four hours	8	14.5	129	43.1	137	38.7
	55		299		354	
Female:						
None	10	47.6	32	33.0	42	35.6
Less than hour	2	9.5	1	1.0	3	2.5
One to three hours	8	38.1	27	27.8	35	29.7
Three to four hours	1	4.8	14	14.4	15	12.7
More than four hours	0	--	23	23.7	23	19.5
	21		97		118	

More disabled females are less likely to read magazines or read books, but no more or less likely to read newspapers. They are somewhat more likely to watch television but not for as long as their healthier counterparts. They are no more or less likely to spend time on a hobby and less likely to listen to the radio. More disabled females spend much more time just sitting (23.7% for over four hours) than the less disabled (none for as long as four hours).

No clear-cut patterns differentiate males from females or the more disabled from the less disabled applicants. For example, degree of severity appears to be inversely related to reading newspapers among males, but no relation is evident among females. On the other hand, severity appears inversely related to reading books among females, but no relation is apparent among males. What is clearly evident regardless of sex, is that degree of severity is associated with time spent just sitting with more "just sitting" among males than females.

In this respect, applicants were asked to respond to several agree-disagree type statements in order to determine their feelings toward time. Twenty-five percent agreed with the statement that if there were only five days per week, they would still have time on their hands, 78 percent agreed that they would want to work right up to the end, and 86 percent endorsed the statement that they would want to work even if it were not financially necessary. Eighty-seven percent agreed that it is no fun taking it easy if there is work to be done. There is some question, of course, whether these responses reflect true feelings or endorsements of what respondents feel are appropriate responses. However, one of the statements was presented to non-disabled wives of applicants as well. Only 9.8 percent of wives felt they would still have time on their hands if there were only five days per week compared to 24.4 percent of applicants.

Among those who reported a hobby, no particular hobby stands out as typical. Handicrafts were reported by 5.7 percent, sewing by 4.9 percent, gardening by 3.2 percent, and card playing by 1.0 percent. No other activity was mentioned that often.

CHAPTER VIII

SUMMARY

This final chapter has at least four distinct aims. First, we will highlight the major findings of the study. Secondly, we shall attempt to integrate what we have found with similar data reported in other studies. Third, where possible, we hope to generate more general and abstract statements from the primarily empirical findings and raw data reported in earlier chapters. Fourth and finally, we shall briefly discuss the implications of our findings with respect to governmental programs and policies.

Summary of Study Findings

This is a follow-up study of former applicants for social security disability benefits. They were contacted $2\frac{1}{2}$ to 5 years after their initial application for benefits. Both those allowed and those denied benefits at the time of application were studied by means of a personal home interview. Wives of male applicants were also interviewed for information concerning families of the disabled. Briefly, the study revealed the following:

1. Four hundred eighty-six or 68.9 percent of the original cases were actually interviewed. Death accounted for the loss of 15 percent; failure to cooperate, 3.8 percent; and inability to locate, 12.2 percent.

2. While there proved to be a disproportionate number of deaths among the older age categories, the more severely limited, among males and among those receiving disability benefits, this major source of systematic bias

was not sufficient to change the makeup of the follow-up population actually interviewed from that of the initial population (Chapter I, Table 5).

3. The study population is composed of former applicants for social security disability benefits. Disability applicants are on the average older than the general labor force population, are less educated, and are found in the lower levels of employment with modest income.

4. The vast majority of the subjects of the study are married (70.6%), white (87.7%), and older (63.9% over 50). They tend to have little personal income (53.4% less than $150 per month), and overall household income is also scant (56.0% less than $300 per month). (Chapter I, Table 7)

5. At the time of the initial application for benefits, 63.5 percent were granted disability benefits. By the time of the follow-up, 74.7 percent had been granted benefits. Retirement removed 5.5 percent from the beneficiary roles, and 1.2 percent returned to gainful employment.

6. Twenty-one percent of those granted benefits had died between the 2½ to 5-year interval.

7. Forty-four and six-tenths percent of the applicants were referred to the Bureau of Vocational Rehabilitation. However, only 29.9 percent had actual contact and only 14.8 percent had contact as a result of the study referral. Only 7.4 percent felt that BVR was of some help.

8. Thirty-two and three-tenths percent of applicants had welfare assistance since the onset of their disability. At time of follow-up 6.7 percent were receiving welfare as part of their long-term adjustment.

9. Thirty-eight and three-tenths percent received aid from the Bureau of Workmen's Compensation in connection with their disability. Still receiving benefits at time of follow-up were 10.5 percent.

10. Veterans' benefits were being received by 13.4 percent of applicants.

11. Social security disability benefits provided the major source of income for most applicants (66.7%), while social security retirement benefits provided the major source of income of 6.8 percent. Employment was the major source for 11.1 percent.

12. The death rate in the initial population was four times greater than the rate of the general population at ages 50-54 and 2.5 times greater than the norm among disabled applicants 65-69.

13. Forty-seven percent reported their health to be poor, 36 percent reported "not so good," and 17 percent reported good health.

14. Twenty-seven percent had seen a doctor or visited a clinic within a week of the interview.

15. While the general population experienced 153 hospitalizations per 1,000 population during 1965, this disabled population had a rate of 253 per 1,000 persons.

16. Eighteen percent reported some improvement in their health, 31 per cent saw no change, and 51 percent said their health had grown worse.

17. Fifty-five percent spent more than seven days in bed in 1966. Of those clinically evaluated in the initial study as fit for work including former job, 15 percent spent four or more months in bed and 30 percent spent a month or more in bed in 1966.

18. At time of application for benefits, 23 percent were confined to house or bed compared to 16 percent at the resurvey.

19. Seventy-one percent felt no limitation in personal care at time of application compared to 51 percent at follow-up.

20. In the area of general employment, 74 percent saw themselves as totally disabled originally; 46 percent did so at follow-up.

21. About one in three applicants reported the need of help of others in bathing, 13.2 percent in getting out of bed, 10.5 percent in getting around the house, 15.8 percent in getting around outside.

22. Thirty-one percent were deemed to be in poor mental health based on an index of psychiatric symptoms.

23. The evidence suggested a straight line relationship between applicants' physical and mental health. Other factors associated with poor mental health were low personal income, those physically dependent on others, and the young as opposed to the old.

24. At the time of follow-up 29.4 percent had personal incomes of less than $100 per month and 85 percent had incomes less than $300 per month.

25. The median income before disability was $350 per month; at follow-up it was $192 per month.

26. Average monthly income of those receiving disability benefits was $166 monthly, of those retired $134, and of those working $321.

27. A loss of income of about $200 per month or more was experienced by 57.7 percent of the disabled, 64.3 percent of the retired, and 20.3 percent of the employed.

28. In 51.3 percent of the cases, there was no other household income above the personal income of the applicant.

29. The median monthly income before disability was $408; at follow-up it had shrunk to $269 per month.

30. Of those living alone, 47.6 percent had incomes of less than $100 per month, 36 percent of the couples had incomes of less than $200 per

month, and 49 percent of the three-member households had incomes of less than $300 per month.

31. The most common source of household income in addition to income of applicant was spouse employment. At time of follow-up 44 percent of wives of applicants were employed.

32. Female spouse employment appeared to be a poor substitute for employment of the male disabled breadwinner. For 38.6 percent of the wives, employment amounted to less than $2,400 per year and for 67.1 percent, it was less than $3,600 per year.

33. No relation was found between degree of physical limitation of applicant and severe income loss. Those with less severe limitation experienced losses as great as the more severely limited.

34. Those applicants not granted disability benefits on the average experienced as much severe income loss as those granted benefits.

35. Forty-five percent responded "yes" to a question as to whether or not they would use a $500 windfall for medical attention.

36. About 18 percent of the wives with children reported that their husband's health condition had negatively influenced the amount or type of schooling their children had received.

37. While 23.1 percent of those less than 45 years of age were found to be employed, only 5.6 percent of those 60-64 were employed at follow-up.

38. Those found fit for work by the study panel had a higher rate of employment (23.2%), than those found unfit (7.5%). A full 63.4 percent who were declared fit for work had no employment since their application for benefits, and 76.8 percent were not employed at the time of follow-up.

Similarly, 63.4 percent of those initially denied benefits experienced no employment whatsoever after being denied.

39. The group of applicants with the highest rate of employment after disability are those declared fit by the study panel and who themselves feel only moderately or less disabled (71.4%); followed by those declared unfit by the study panel but who themselves feel only moderately disabled (45.9%). Next are those who were found fit by the panel but who themselves feel severely disabled (7.1%) followed by those declared unfit and who themselves feel severely disabled (2.2%).

40. Twenty-six percent of the employed earn less than $200 per month; 48 percent earn less than $3,600 per year.

41. Of all the applicants who were legally determined to be disabled and placed on disability benefits, only 12 or 3.8 percent returned to work. Of these, five were only minimally employed at home or in sheltered workshops. Only five or 2.4 percent were employed sufficiently to remove them from the disability roles.

42. Only 25.5 percent of those denied disability benefits and 7.4 per cent of those granted benefits did any job hunting after their application had been passed upon. Virtually all claimed it was of no use because of their health condition. This was a realistic appraisal for many since over half of those denied benefits were deemed not placeable by the original study panel. In other words, while their physical condition did not make them unemployable, they were unemployable for other reasons, or if employable, they were not placeable.

43. Forty percent of those not employed felt there were some conditions under which they could work. This was true of 37 percent of those receiving benefits and 51 percent of those denied benefits.

44. Friends were the most important source of help in finding a job, 14.9 percent of the time. The state employment service was credited with three assists, and the Bureau of Vocational Rehabilitation with two.

45. One percent of these applicants are institutionalized, 14 percent live alone, and 64 percent live in typical nuclear family settings, while 7.3 percent are in extended settings.

46. Minor children are present in 28.5 percent of the applicant households.

47. Sixty-two percent of the applicants were living in the same location; ten percent had moved three times or more.

48. Household routines had been changed in 16 percent of the households with respect to meal preparation, 13 percent with respect to table setting, and 16 percent in the area of grocery shopping.

49. Sixty percent of the married couples spent more time together, 59 percent spent more time at home, and 54 percent spent less time with relatives as a result of the husband's physical limitation.

50. Fifty-one percent reported a decrease in time spent with relatives due to the husband's physical limitation. Only 11.3 percent of the applicants saw their mothers as often as monthly, 5.4 percent saw fathers that often, 30.0 percent eldest sons, and 24.2 percent eldest brothers. No relative was seen as often as monthly by over half of the applicants.

51. Help from relatives outside the household was found in 19 percent of the cases in the area of cooking or housework, 22 percent of the cases in regard to shopping, and in the area of looking after children, in 33 per cent of the households with children.

52. Lending money was a source of outside help from relatives in 29 percent of the households and the furnishing of food and clothing in 11 percent.

53. About 39 percent of the disabled males and 19 percent of the females spend four or more hours per day just sitting. One-fourth of all applicants felt if there were only five days a week they would still have time on their hands.

Relation to Other Studies

In 1960 a rather comprehensive survey of disability beneficiaries and workers with a disability freeze was carried out in eight metropolitan areas.[11] Data were collected from a stratified sample of disabled workers: 2,280 aged 50-64 who were receiving benefits and 1,113 under age 50 not receiving benefits but who had been allowed a wage freeze. A wage freeze preserved the workers' eligibility for old age benefits as of the time of disability, since at that time no disability benefits were available for disabled workers under age fifty. Workers who, prior to 1960, would be on a wage freeze are now on benefits. The essential difference, then, between the 1960 survey population and the population of the present study is associated with this major change in the program whereby presently beneficiaries are of all adult ages rather than 50 years of age or more. These comparisons are contained in Tables 79 and 80. The most meaningful comparisons are between those under age 50 on a disability freeze in the 1960 study with those under 50 allowed benefits in the follow-up study, and between those 50 or more on benefits in the 1960 study with those 50 or more on benefits in the follow-up.

Table 79

Comparison of Findings of the 1960 Disability Survey and the Follow-up Study on Selected Variables

Selected Variables	1960 Study		Follow-up Study			
	Under age 50 on freeze	50 or more on benefits	Under age 50 Benefits:		50 or more Benefits:	
			Allowed	Denied	Allowed	Denied
	%	%	%	%	%	%
Marital Status						
Single	41	12	6	5	5	7
Married	38	63	74	76	68	66
Widowed	3	12	5	6	14	8
Divorced, separated	15	11	14	17	12	19
Not reported	2	1	--	--	--	--
Total	100	100	100	100	100	100
Children Under 19						
Children	25	9	45	47	18	19
No children	75	91	55	53	92	91
Total	100	100	100	100	100	100
(Female) Spouse Employment						
Not employed	35	49	45	54	57	32
Employed	65	51	55	46	43	68
Total	100	100	100	100	100	100
Living Arrangements of Married Couples						
Live alone	79	75	76	76	71	70
Live with other relatives	21	25	24	24	29	30
Total	100	100	100	100	100	100
Rehabilitation Services						
Received	28	7	17	26	6	9
Not received	72	93	83	74	94	91
Total	100	100	100	100	100	100

Table 80

Family Income Per Year by Sex and Marital Status and Income of Wives of Disabled Workers

Sex and Marital Status	1960 Study		Follow-up Study			
			Under age 50 Benefits:		50 or more Benefits:	
	Under age 50	50 or more	Allowed	Denied	Allowed	Denied
Median Personal Income of Disabled Workers						
Married men	$4,400	$3,990	$4,026	$4,642	$3,432	$3,331
Married women	6,320	5,440	5,423	4,843	3,499	4,500
Non-married men	2,910	1,930	1,818	1,872	1,780	1,530
Non-married women	3,170	2,790	1,299	960	1,448	1,424

First among the two groups under 50, those in the follow-up study are much more likely to be married (74%) than those in the 1960 study (38%). They are consequently more likely to have dependent children (45 vs. 25%) and their spouses are less likely to be employed (55 vs. 65%). About the same number of married couples live alone without other relatives (76 vs. 79%). Those on a freeze as opposed to actual benefits were more likely to receive rehabilitation services (28 vs. 17%). Those on the freeze appeared to be better off economically as far as household income is concerned at each level of sex and marital status (Table 80).

With respect to the old age groups on benefits in the two studies, no apparent differences exist in any of the variables examined with the exception of the presence of children and employment of the wife. Only nine percent in the 1960 study had minor children compared to 18 percent in the follow-up study. This no doubt helps to account for the fact that wife employment was 65 percent in the former and only 55 percent in the latter. Once again, subjects appear to be much better off financially in terms of household income in the 1960 study in each sex and marital status category.

Barbara Levenson and Jerome Green analyzed data on a sample of 899 persons who had gone back to work after being allowed social security disability benefits to determine some of the factors associated with successful return to work after severe disability.[12] Since there are only 12 cases of return to employment after allowance in our study, it is not possible to compare findings. However, their findings are of interest and suggestive of what might be expected if our sample of returned workers had been larger. They found that the younger, better educated workers with a primary disability condition of either mental illness or tuberculosis were most likely to stage a successful vocational recovery. The optimum period for resuming gainful employment was 2 to 3 years after onset of disability. The factor most closely associated with return to employment, namely disabling conditions of mental illness and tuberculosis, is for the most part absent in our study, since applicants with these types of impairments were initially screened out of our study. The 12 or 3.8 percent of the applicants granted benefits in our study who returned to work were suffering from other impairments. And since the optimum period for return to employment (2-3 years after onset) has passed for our applicants, little additional re-employment is likely.

Only one other published study that we know of investigates in any detail the subsequent experiences of applicants who were denied benefits. This study was carried out by the Division of Vocational Rehabilitation of the State of West Virginia and involves 695 cases of denials in that state.[13] The interviewing was carried out in 1961 and involved a ten percent sample of all cases denied during 1955 through 1960. However, the vast majority of cases were from the years 1957 through 1959 with roughly a two-year interval between denial and follow-up. A few of the findings may be fruitfully compared with the findings of the present study. These comparisons are contained in Table 81.

Table 81

Comparison of Findings of the West Virginia and the Present (Ohio) Studies

Comparable Findings	West Virginia Study %	Ohio Study %
Proportion of denied applicants deceased by time of follow-up	6.0	4.2
Proportion of applicants denied initially who were later allowed benefits	14.0	30.0
Proportion of denied applicants with some employment after denial of benefits	24.0	35.0
Proportion of denied applicants working at time of follow-up interview	16.0	24.0
Proportion of denied employed applicants earning less than $50 per week	74.0	26.0

It will be noted that the denied applicants in the present (Ohio) study fared somewhat better than those of the West Virginia study. More were found to be employed, employment income was greater, and somewhat fewer were found to be deceased. On the other hand, a greater proportion in the Ohio study were later granted benefits (30%) than in the West Virginia study (14%). However, the interviewers in the West Virginia study estimated that an additional 26 percent should be reconsidered for disability benefits. It is difficult to say precisely what these differences mean.

It is likely that the labor market is better in Ohio, which would account for some of the differences. But the samples are not directly comparable since the time interval is not exactly the same, and the Ohio sample excludes certain impairment categories (primarily psychiatric and infectious) that are included in the West Virginia study.

One recent and comprehensive study of the disabled adult population is the 1966 Social Security Survey of the Disabled.[14] This study is being reported in a series of reports published by the Office of Research and Statistics of the Social Security Administration. However, its very comprehensiveness rules out comparisons with the findings of our study. It covers all disabled adults aged 18-64, while the present study is limited to applicants for social security disability benefits and hence involves disability only within the labor force. It is interesting to note, however, that only 26 percent of the adults disabled for more than six months were receiving funds under a public income-maintenance program and only 4.7 percent were receiving social security disability benefits. This is probably due to the fact that many disabled adults do not qualify for benefits as former members of the labor force with social security coverage while others, although disabled, are gainfully employed.

Implications of the Findings

In defining the purpose and scope of the follow-up study in Chapter I, several general and specific questions were raised: What in general happens to applicants who perceive themselves to be disabled but who are not found to meet the legal criteria of disability and are denied benefits? Do they return to work? Do they fall upon the responsibility of other social agencies? What alternative coping mechanisms are available and utilized by disabled workers and their families? On the other hand, what are the impacts of being a long-term beneficiary of disability benefits? Finally, how valid were the predictions and prognostications made at the time of the disability determination by both the clinical team and state examiners, particularly with respect to rehabilitation potential?

All of these questions have been addressed, albeit indirectly at times, throughout the study report. No attempt will be made to summarize this material in detail at this point. Rather, we believe it to be of more value to address them much more generally, with at times doing an injustice to particular cases, so that the broader implications in terms of governmental programs and policies may be recognized.

What happens to the denied applicant? Four in ten were subsequently granted benefits within a five-year period. A few died or reached retirement age. A little under one in four were found to be employed. Fourteen percent had no personal income of any kind, from neither work nor benefits from public programs. Very generally, then, the alternatives when an applicant is denied benefits are the following and are listed in the order of their importance: 1) try again and eventually be allowed benefits, 40 percent; 2) secure employment, 23 percent; 3) rely upon some other program, such as workmen's compensation, veterans benefits or public welfare, 23 percent, and finally; 4) adjust to the absence of any direct personal income, 14 percent.

What happens to those allowed benefits? Being placed on disability benefits appears to be a permanent type of adjustment for the vast majority of applicants. A few were switched to retirement benefits when they reached age 65. A significant proportion died in the five-year period (17%). About four percent were found to be gainfully employed.

Validity of the predictions and prognostications. By and large the validity of the predictions and prognostications of the disability determination agency and the study team can only be assessed indirectly and inferentially. This is due to a number of factors: 1) The follow-up study did not include any actual physical examination of the applicants, to say nothing of a repeat of the same tests and procedures used in the original study. 2) Even if the follow-up subjects had been given a physical examination, it would be impossible to determine what differences in physical assessments were actually due to a change in physical condition and what differences actually reflect limitations in reliability and validity of testing procedures and assessments. 3) Finally, under the most ideal circumstances, it would be impossible to say to what extent departures from predictions were due to faulty predictions rather than extraneous factors which influenced the outcome of the cases in question.

The data, however, are suggestive. First with respect to the legal determination of disability, an interesting pattern prevails. It is possible to pinpoint the rate of allowance at five points in time. These rates are presented in Table 82. It will be noted that an additional 22.3 percent were granted benefits from the time of the first determination to the last determination represented in the follow-up study. It is not possible to say how many of these subsequent allowances are due to the additional attention given these claims, the persistence of the applicant, or actual worsening of the claimant's condition. The latter may well play an important part, since many applicants were suffering from degenerative conditions.

Table 82

Proportion of All Applicants in the Follow-up Study (486) Allowed Disability Benefits at Different Points in Time

Points in Time	Proportion Allowed Benefits %
Initial determination (made before the comprehensive examination of the study team)	52.4
Redetermination (made after the comprehensive examination of the study team)	57.7
Outcome of initial application reported by applicants at time of follow-up	63.5
Outcome after requests for hearings reported by applicants at time of follow-up	65.2
Outcome including reapplications reported by applicants at time of follow-up	74.7

However, even here the continued persistence of the applicant is required if they are to eventually receive benefits. In fact, it was the general impression of the interviewers that many of those denied benefits but who did not press their claim further still felt their claims of disability were legitimate. It is not possible to say what the outcome would have been if these applicants had requested hearings or reapplied for benefits.

Failure to secure employment by applicants who were finally denied has not been demonstrated to result from the physical limitation per se. Many of these applicants may well be technically employable but not placeable due to a tight labor market where impaired workers must compete with healthy superior workers. Qualification for employment is not the crucial issue; the ability to obtain a job is.

In the original study, rather elaborate recommendations were made regarding potential for rehabilitation of applicants. No possibility existed for testing the validity of these prognostications, since only a small number of applicants received vocational rehabilitation services. While 45 percent were referred to the Bureau of Vocational Rehabilitation, 15 percent had contact as a result of the study referral.

FOOTNOTES

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12. Barbara Levenson and Jerome Green, "Return to Work After Severe Disability," Journal of Chronic Diseases, 1965, Vol. 18, pp. 167-80.

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